

# Command EDIT EXTENDED for HMG library.

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## Description

EDIT EXTENDED, is a command to manage a database.

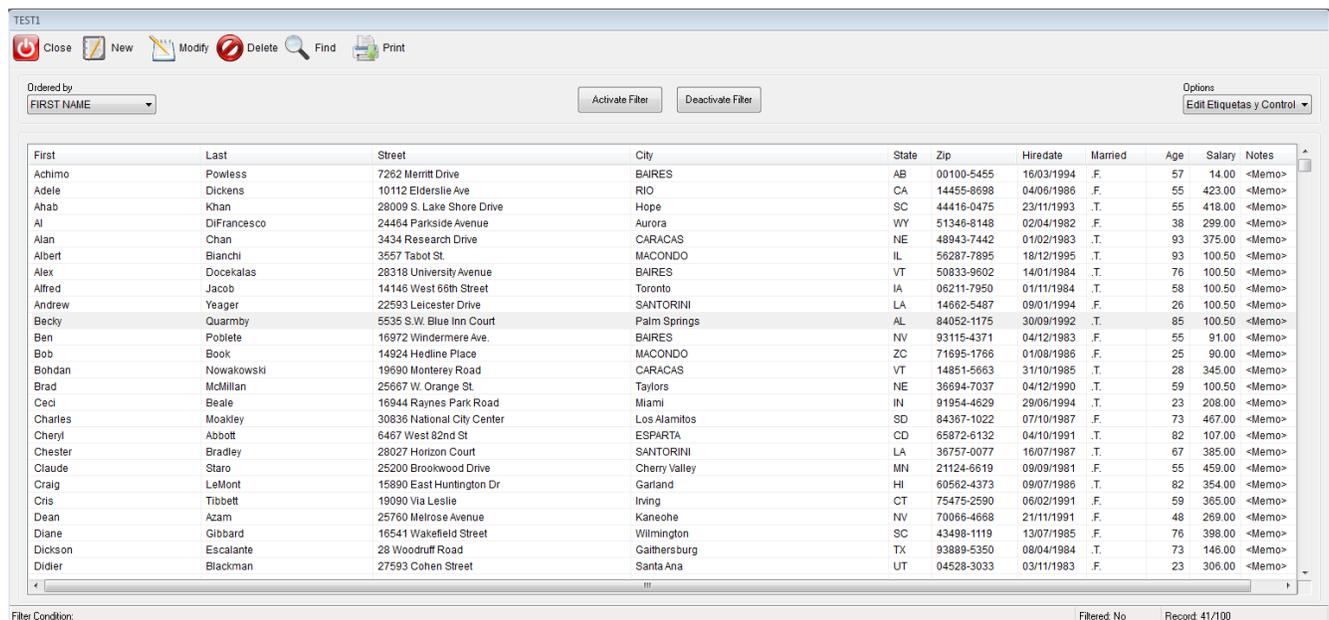
Initially it is made to manage databases using DBFNTX y DBFCDX drivers.

Others databases drivers will render unexpected results.

## Limitations

- Does not implement ListBox or ComboBox
- You can not search by memo neither by logical fields.
- You can not search on compound indexes.
- If you do, the search will use just the first field on the compound index.

## List Window



The screenshot shows the TESTI application window with a menu bar (Close, New, Modify, Delete, Find, Print) and a toolbar. The main area displays a table of records. The table has columns: First, Last, Street, City, State, Zip, Hiredate, Married, Age, Salary, and Notes. The records are sorted by First Name. The status bar at the bottom indicates 'Filter Condition: Filtered: No Record 41/100'.

First	Last	Street	City	State	Zip	Hiredate	Married	Age	Salary	Notes
Achimo	Powless	7262 Merritt Drive	BAIRES	AB	00100-5455	16/03/1994	F.	57	14.00	<Memo>
Adele	Dickens	10112 Elderslie Ave	RIO	CA	14455-8698	04/06/1986	F.	55	423.00	<Memo>
Ahab	Khan	28009 S. Lake Shore Drive	Hope	SC	44416-0475	23/11/1993	T.	55	418.00	<Memo>
Al	DIFrancesco	24464 Parkside Avenue	Aurora	WY	51346-8148	02/04/1982	F.	38	299.00	<Memo>
Alan	Chan	3434 Research Drive	CARACAS	NE	48943-7442	01/02/1983	T.	93	375.00	<Memo>
Albert	Bianchi	3557 Tabot St.	MACONDO	IL	56287-7895	18/12/1995	T.	93	100.50	<Memo>
Alex	Docekalas	28318 University Avenue	BAIRES	VT	50833-9602	14/01/1984	T.	76	100.50	<Memo>
Alfred	Jacob	14146 West 66th Street	Toronto	IA	06211-7950	01/11/1984	T.	58	100.50	<Memo>
Andrew	Yeager	22593 Leicester Drive	SANTORINI	LA	14662-5487	09/01/1994	F.	26	100.50	<Memo>
Becky	Quarmby	5535 S.W. Blue Inn Court	Palm Springs	AL	84052-1175	30/09/1992	T.	85	100.50	<Memo>
Ben	Poblete	16972 Windermere Ave.	BAIRES	NV	93115-4371	04/12/1983	F.	55	91.00	<Memo>
Bob	Book	14924 Hedline Place	MACONDO	ZC	71695-1766	01/08/1986	F.	25	90.00	<Memo>
Bohdan	Nowakowski	19690 Monterey Road	CARACAS	VT	14851-5663	31/10/1985	T.	28	345.00	<Memo>
Brad	McMillan	25667 W. Orange St.	Taylor	NE	36694-7037	04/12/1990	T.	59	100.50	<Memo>
Caci	Beale	16944 Raynes Park Road	Miami	IN	91954-4629	29/05/1994	T.	23	208.00	<Memo>
Charles	Moakley	30838 National City Center	Los Alamitos	SD	84367-1022	07/10/1987	F.	73	467.00	<Memo>
Cheryl	Abbott	6487 West 82nd St	ESPARTA	CD	65872-6132	04/10/1991	T.	82	107.00	<Memo>
Chester	Bradley	28027 Horizon Court	SANTORINI	LA	36757-0077	16/07/1987	T.	67	385.00	<Memo>
Claude	Stano	25200 Brookwood Drive	Cherry Valley	MIN	21124-6619	09/09/1981	F.	55	459.00	<Memo>
Craig	LeMont	15690 East Huntington Dr	Garland	HI	60562-4373	09/07/1986	T.	62	354.00	<Memo>
Cris	Tibbett	19090 Via Leslie	Irving	CT	75475-2590	06/02/1991	F.	59	365.00	<Memo>
Dean	Azam	25760 Melrose Avenue	Kaneohe	NV	70066-4668	21/11/1991	F.	48	269.00	<Memo>
Diane	Gibbard	16541 Wakefield Street	Wilmington	SC	43498-1119	13/07/1985	F.	76	398.00	<Memo>
Dickson	Escalante	28 Woodruff Road	Gaithersburg	TX	93889-5350	08/04/1984	T.	73	146.00	<Memo>
Didier	Blackman	27593 Cohen Street	Santa Ana	UT	04528-3033	03/11/1983	F.	23	306.00	<Memo>

## Syntax

*All the parameters are optional.*

```
EDIT EXTENDED ;  
[ WORKAREA cWorkArea ] ;  
[ TITLE cTitle ] ;  
[ FIELDNAMES acFieldNames ] ;  
[ FIELDMESSAGES acFieldMessages ] ;  
[ FIELDENABLED alFieldEnabled ] ;  
[ TABLEVIEW alTableView ] ;  
[ OPTIONS aOptions ] ;  
[ ON SAVE bSave ] ;  
[ ON FIND bFind ] ;  
[ ON PRINT bPrint ]
```

## Basic use

```
EDIT EXTENDED WORKAREA cWorkArea
```

## Edit Window

The image shows a 'Modify record' dialog box with a title bar containing 'Modify record' and three buttons: 'Cancel' (with a red X icon), 'Ok' (with a green checkmark icon), and 'Copy' (with a document icon). The main area contains a form with the following fields:

- First: Andrew
- Last: Yeager
- Street: 22593 Leicester Drive
- City: Kempton Park
- State: LA
- Zip: 14662-5487
- Hiredate:  09/01/1994
- Married:
- Age: 26
- Salary: 100.50
- Notes: This is a test for record 52

Two red arrows point to the 'State' field and the text 'No ListBox'.

**If no parameter is passed, EDIT command will use the open database in the actual area.**

- [cWorkArea] Text string with the alias name of the database to work on.  
By default, it will be the active one.
- [cTitle] Text string with the title of the main browse window.  
By default, it will be the alias of the active db.
- [acFieldNames] Text array with the descriptive name of the fields in the database  
Should agree with database fields number.  
Should agree with database fields number the field names. ???
- [acFieldMessages] Text array to be used on the status bar when adding or editing a record  
Should agree with database fields number.  
If it is empty, will be filled with system default values.
- [alFieldEnabled] Logic array showing if the corresponding field is enabled at editing time.  
Should agree with database fields number.  
By default, all fields will be enabled ( .t. ).
- [aTableView] Logic array showing if the corresponding field is visible on the main browser table.  
Should agree with database fields number.  
By default, all fields will be visible ( .t. ).
- [aOptions] 2 level array. First one is a text array, while the second contains code blocks  
First subarray contains the option descriptions.  
Second one contains the code blocks to be executed when selected.  
If none is passed, the choose option list will be disabled.
- [bSave] Code block like { |aValues, lNew| Action }  
which will be used when save button is clicked.  
- aValues will contain the fields to save.  
- lNew shows if you are adding new (.t.) or editing (.f.) record  
Should return .t. to exit the edit mode.  
If empty, the fields will be saved by internal routine.
- [bFind] Code block to be used when SEARCH button is clicked.  
If empty, internal routine will be used.
- [bPrint] Code block to be used when LIST button is clicked.  
If empty, internal routine will be used.

## Function ABM3() <Editexplus> for the HMG library.

It is a modification to the ABM2() function (EDIT EXTENDED command)

The parameters are the same as the EDIT EXTENDED command plus two additional ones, the first one (parameter No. 11) is the name of a file with the description of the form. (xxxx.arr)

The other (parameter No. 12) is an array that allows to have ComboBox or ListBox

Example with 2 horizontally distributed columns

The screenshot shows a 'Modify record' dialog box with a light blue header bar containing 'Cancel', 'Ok', and 'Copy' buttons. The main area is divided into two columns. The left column contains: First (Andrew), Street (22593 Leicester Drive), State (LA), Hiredate (09/01/199), Age (26), and Notes (This is a test for record 52). The right column contains: Last (Yeager), City (SANTORINI), Zip (14662-5487), Married (checkbox), and Salary (100.50). Red arrows point to the State and City dropdown menus, labeled 'ListBox', and the Age field, labeled 'Size changed'.

The file with the description of the form (xxxx.arr) is generated with a single click, as explained below.

Example with 3 vertically distributed columns

The screenshot shows a 'Modify record' dialog box with a light blue header bar containing 'Cancel', 'Ok', and 'Copy' buttons. The main area is divided into three vertical columns. The first column contains: First (Alan), Last (Chan), Street (3434 Research Drive), and City (CARACAS). The second column contains: State (NE), Zip (48943-7442), Hiredate (01/02/198), and Married (checkbox). The third column contains: Age (93), Salary (375.00), and Notes (This is a test for record 35).

For Combo / ListBox you can: (see page 6)

- Pass the options as parameters.
- Indicate a related table to obtain them.
- Create a function that returns the list of options.

## Creation of array definition files (11th parameter)

Simply running 'ABM3generar()' in "h\_edit\_makeArray.prg"  
(This function should not be available in the final project)

4 files are created so that you choose the one that best suits your need.

Organized in 2 columns or in 3 columns.

You must choose one and take it where it will be used. You can change the name if you wish.

"ABM3generar()" Opens a dialog box that allows you to choose any of the tables that are open. Once the table is chosen, the mentioned files 'xxxx.arr' are generated



In the final project together with the newly created \*.arr file, it must be "h\_edit\_exPlus.prg" where the ABM3() function is included.

In the DEMO in the menu / **Make arrays / make all 4 arrays.**

The 4 files mentioned are generated.

In the other menu items, the result of all of them is shown.

**Compatibility menu:** Show the traditional way without passing any parameters.

**Menu 2 columns:** Organized from top to bottom or from left to right.

**Menu 3 columns:** Organized from top to bottom or from left to right.

## How to make the ComboBox

The 12th parameter → ComboBox

It is an array that contains one element for each control (field)

This element can be:

- **A text field with the reference to the source table and field of the ComboBox.**
- **An array with the list of options**

Only those that match a text field matter, the others will be ignored.

In the first case it must contain the reference to the table and field of origin of the ComboBox.

As follows: *“Table->Field”*

```
aCombo := {,,,"Ciudades->City" ,,,,,,}  
ABM3 (,,,,,aOptions,,,,,"TEST1.3h.arr",aCombo)
```

In the second case, the internal arrays corresponding to each text control in which you want to have a ComboBox will contain the list of options. (This would be a ListBox)

```
aList := {,,,{ "AB", "CD", "AR", "CA", "AO", "ZC", "SC", "WY", "NE", "IL", "VT", "IA", "LA" },,,,,,}  
ABM3 (,,,,,,,"TEST1.arr",aList)
```

Both styles can be combined into a single array. (See demo)

You can have both ComboBox and ListBox in the same form.

It must be a single array that contains them.

- **The text fields corresponding to positions of the array that are empty, will behave like a normal TextBox.**
- **If the corresponding position is a text field, the referenced table (if it exists and is open) will be used to build the ComboBox.**
- **If the corresponding position is an array, the components (quoted text) will be used to build a ListBox.**
- **Any of these methods takes preference over a possible function defined as explained on the next page.**

All methods are shown in the Demo

- The last form (candidate to be eliminated because it is now unnecessary):  
No parameters are passed, but a function is created as follows:

## How to make the ListBox

For this, a simple function must be created for each text control.  
The name of this function must have the form 'LB\_dbName\_FieldName' and must return an array of text with the list of options.

Example in 'demo.prg'

```
FUNCTION LB_Test2_STATE()  
RETURN {"AB","CD","AR","CA","AO","ZC","SC","WY","NE","IL","VT","IA","LA"}
```

---

In this other example, in the field 'nomina' of the 'personal' table, data is entered from the 'NomDefi' table (field 'personal')

```
FUNCTION LB_personal_NOMINA()  
  local nRegistro := 0  
  local aOpciones := {}  
  nRegistro := NomDefi->( RecNo() )  
  NomDefi->( dbGoTop() )  
  Do While NomDefi->( !Eof() )  
    Aadd (aOpciones,NomDefi->nomina)  
    NomDefi->( DbSkip() )  
  End  
  NomDefi->( dbGoTo( nRegistro ) )  
  RETURN aOpciones
```

These functions must be visible when calling ABM3()

## How to make small modifications

A relatively simple function is provided for this purpose.

It reads the array "xxxx.arr" with the definition of the controls and labels and allows you to modify their relative positions and their size, as well as the text of the messages.

**Attention: Use it very carefully.**

**It is a very elementary function. It does not perform any checks. It has no undo.**

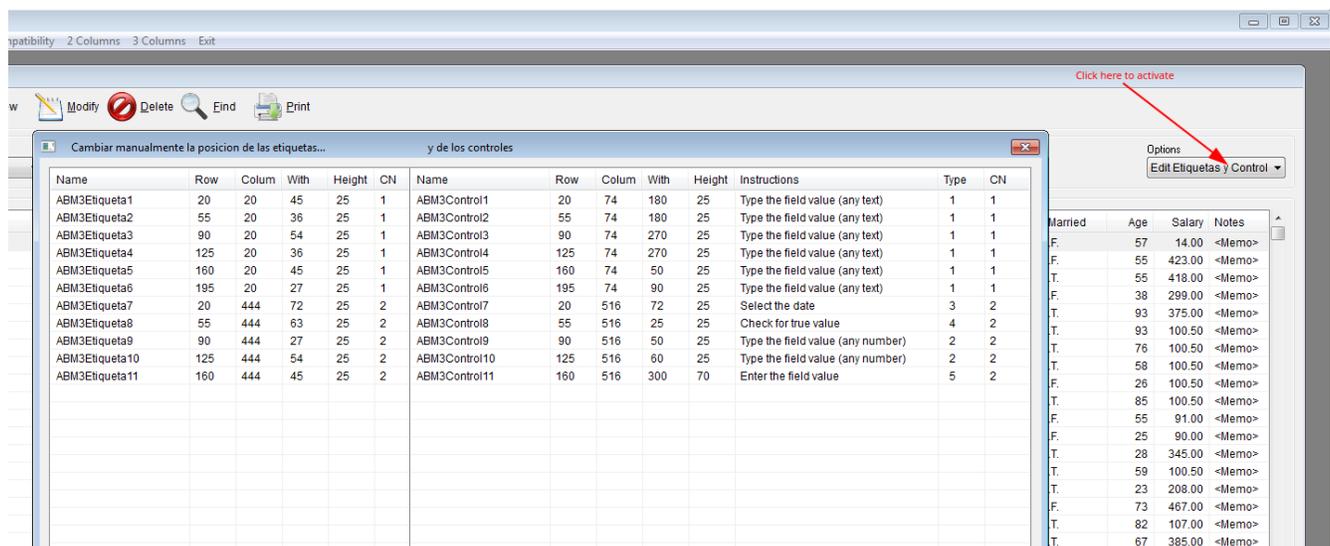
**If everything breaks down the only solution is to recreate the file.**

**It does not recalculate the size of the window so a control may end up outside the visible space.**

It is recommended only for small adjustments although in practice it is very powerful.

Radical changes in position could be made, including adding new text labels.

Its use is at the discretion (and risk) of the designer. It is provided only as an option.



The file "h\_edit\_ModifArray.prg" contains the function "ModificarArray()"

The 'user option' available in Edit Extended is used in the DEMO (see demo.prg)

This is available in the List window at the top right.

A box opens with the position of the defined labels and controls.

It works on the definition file (xxxx.arr) that is currently in use.

With Click or Enter you can modify the value of any box. As mentioned it does not do any control.

The array is saved when closing this window (it doesn't matter if something was changed or not)

To make the changes effective, you must close the list window and open it again to read the recently modified file.

**Compatibility Mode:**

Without including file "dBaseName.arr" (The 11th parameter) it goes in compatibility mode.

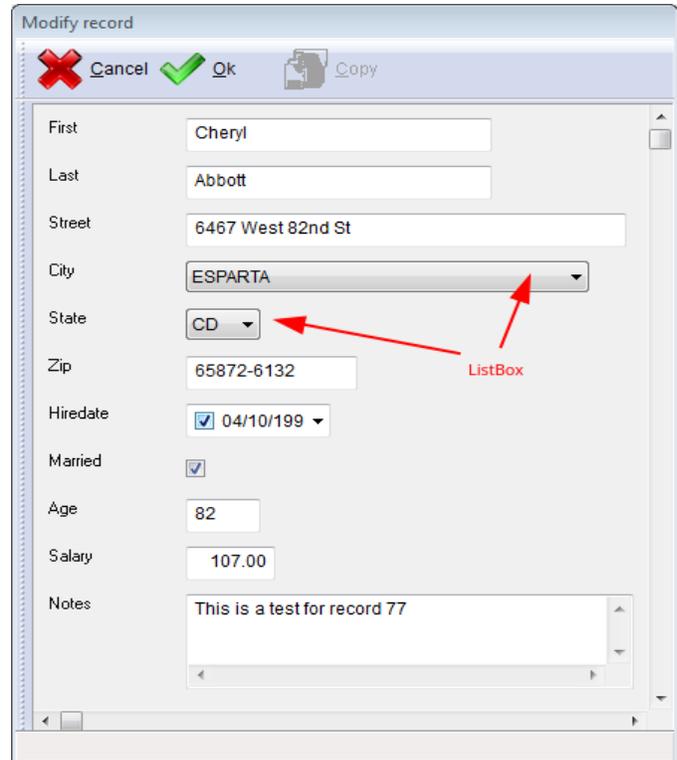
The ListBox are implemented independently of parameter 11, and can work together or without it.

This form was traditionally generated but includes ListBox. → → → → → →

The ListBox appears only if the 12th parameter or the corresponding function is included, as explained on page 7.

By not including the 11th parameter (xxxx.arr) the traditional arrangement is used but the functions that determine the use of the ListBox are recognized.

If you want full compatibility just do not include this parameter neither the function.



## Summarizing

- The file 'h\_edit\_exPlus.prg' is the only one that should be included in the final project.
- 
- The file 'h\_edit\_makeArray.prg' should only be where the controls are defined.  
It must be accompanied by MsgExtended.prg.
- 
- If 'h\_edit\_ModifArray.prg' is used, it should only be where the controls are defined.
- It should never be available to the user because it will destroy the definition file (xxxx.arr)
- 
- The generated 'xxxx.arr' files must be copied to the final project, next to the tables.
- 
- The functions 'LB\_dbName\_FieldName' -if they are used- must exist (be visible) only in the final project, when you call ABM3()

## **Technical Considerations**

.....to be done.....