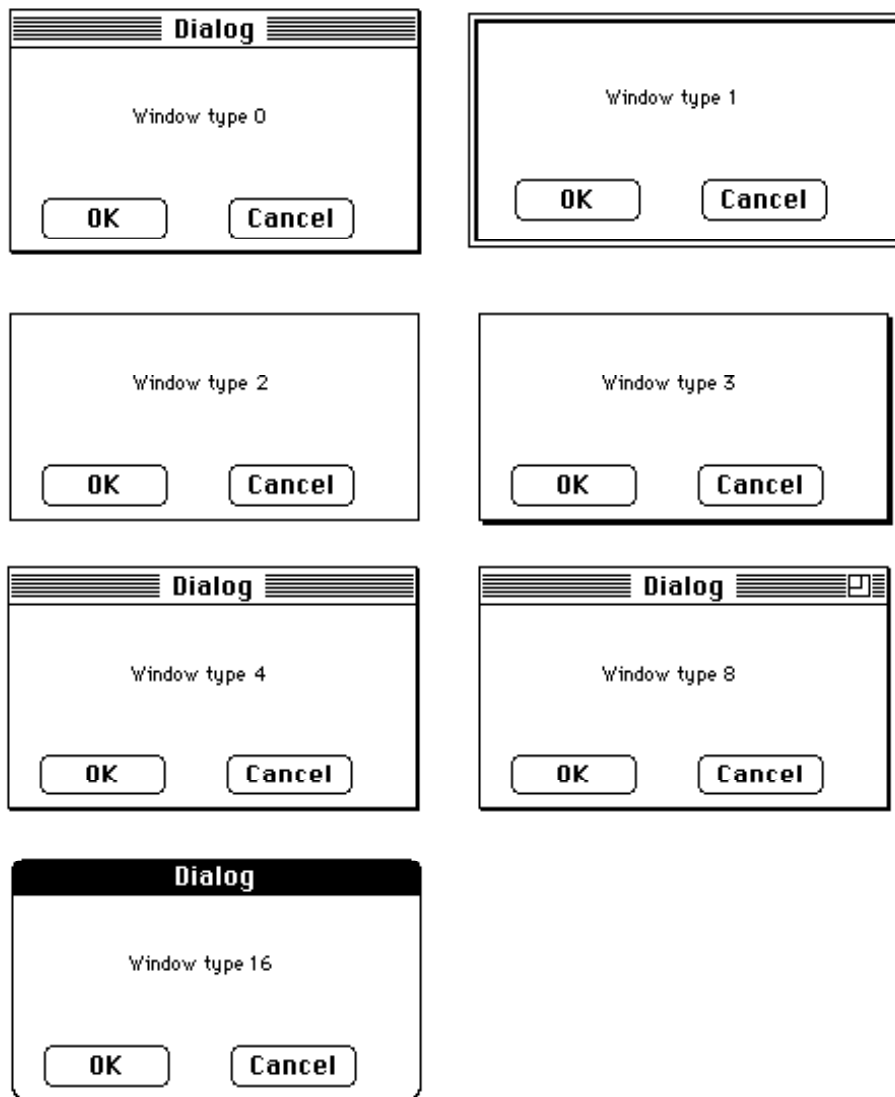**#51**   **Window type descriptions**

Written by Ron Dell'Aquila & Dave Terry
Published Date   Tue, Feb 2, 1988
_____

OPEN WINDOW command allows various window types to be used.
_____

The OPEN WINDOW command allows the database designer freedom to choose among a variety of windows.
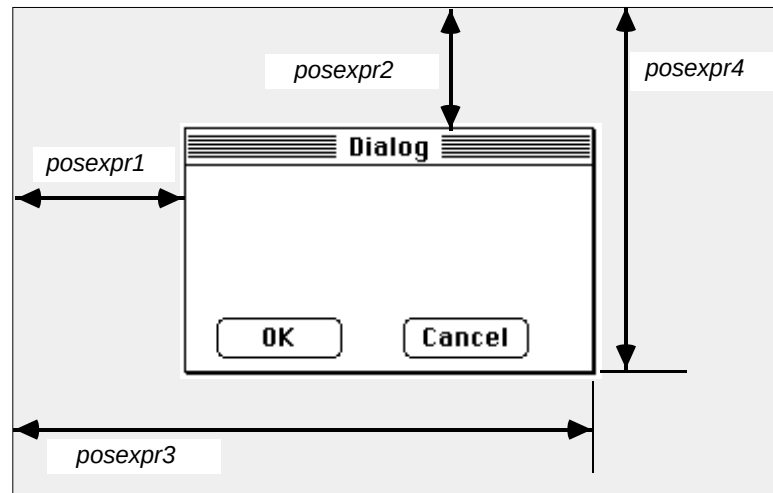

All of the Macintosh's window types are available from within 4th Dimension.

The syntax for OPEN WINDOW is:
OPEN WINDOW (*posexpr1*;*posexpr2*;*posexpr3*;*posexpr4*;«*posexpr5*;«*strexpr*»»)

where:

Relationship of the positive integer expression variables, in pixels,
between a dialog and the Macintosh window .

posexpr5 is the type of window you want to draw and corresponds to the six standard windows available through the Macintosh window manager.

Number	Window Name	Description
0	documentProc	Standard document window, can grow
1	dBoxProc	Alert box or modal dialog box
2	plainDBox	Plain box
3	altDBox	Plain box with drop shadow
4	noGrowDocProc	Document window without size box, no grow
8		Document window with zoom box, can grow
16	rDocProc	Rounded-corner window

The user is able to manually grow window types 0 and 8, while window type 4 cannot grow its dimensions.

4D allows you to perform actions based on menu selections while a layout is on the screen by testing for Menu selected in the layout procedure. This is also true for dialogs. However, if you have put the layout or dialog into a user defined open window of the type "1" you will not be able to select menus or switch to other applications under multifinder. This is normal operation while using the **dBoxProc** type of window, typical uses are alert boxes or modal dialog boxes.

Precede a DIALOG command with the OPEN WINDOW command to open the dialog at a specific location or size. For example the first illustration was generated by the following procedure.

```
`Layout procedure:Test Dialog--original, hard to use syntax
i:=0
ok:=1
While ((i<16)&(ok#0))
        OPEN WINDOW(50;100;250;200;i;"Dialog")  `posint 1;2;3;4;type;title
        vMessage:="Window type of "+String(i)  `this field is in the dialog's layout
        DIALOG([File];"Layout")
        CLOSE WINDOW
        i:=i+1
```

End while

Another useful method of utilizing the OPEN WINDOW command is to send the window's x and y parameters along with the window type and optionally, the title, to a global procedure. The *OPENMYWINDOW* global procedure will open a window centered on any Macintosh screen automatically. It can be called from any other procedure at any time. It is much easier to pass the x and y coordinates of the window instead of the usual syntax. The following will open the window centered on the screen, 100 pixels from the top edge of the screen.

```
`global procedure: OpenMyWindow
`$1=x-dimension, $2=y-dimension, $3=window type, in my case, hard coded,$4=title
OPEN WINDOW((Screen width/2)-($1/2);100;(Screen width/2)+($1/2);100+$2;$3;$4)
```

This layout procedure does the same as the above, except the open window is performed by passing parameters to the OpenMyWindow global procedure.

```
`Layout procedure:Test Dialog2--easier, readable syntax, calling OpenMyWindow
i:=0
ok:=1
While ((i<16)&(ok#0))
        OpenMyWindow (200;100;1;"Dialog")  `x; y; type; title to OpenMyWindow global
        vMessage:="Window type of "+String(i)
        DIALOG([File];"Layout")
        CLOSE WINDOW
        i:=i+1
End while
```