
Writing Control Panel Files

You should keep the following points in mind if you are writing or modifying a control panel file:

- A control panel file displays a modeless dialog box with no menu bar. You can use the editing functions in the Finder's menu bar if necessary, but you cannot add any menu choices. The Finder passes messages to your **cdev** function for the following standard selections from the Edit menu: Undo, Cut, Copy, Paste, and Clear. Your **cdev** function can respond to these messages when it is appropriate to do so; for example, if your control panel has an editable text box, you can respond to these editing functions when the insertion point is within this field.
- The rectangles defined by the '**nrct**' resource are no longer restricted to the size of the **Control Panel**; however, to maintain compatibility with previous operating systems, the rectangles' coordinates should not exceed (-1,87,255,322).
- There is no longer a guarantee that the resources provided by the **Control Panel** are available when your control panel file is running. If your control panel file uses any **Control Panel** resources, it might not run in System 7.0. If your control panel file strictly follows the specifications in the **Control Panel** chapter of Volume V, however, it should run with no difficulty in System 7.0 (or later).
- Your control panel file can continue to use the **CPDialog** parameter passed to the **cdev** function to obtain the dialog item list and the **numItems** parameter to determine the number of items in the dialog item list. If you use these parameters in your control panel file to gain access to the items in your dialog item list, your control panel file will operate correctly with both the **Control Panel** and the Finder. If you assume some value for the **numItems** parameter, however, your control panel file will not operate correctly in both situations. Dialog item lists are described in the **Dialog Manager**.
- If the '**mach**' resource in your control panel file indicates that the **cdev** function cannot run, the Finder displays an error message for the user and does not open the control panel file. In contrast, the **Control Panel** does not display the icon for a control panel file if the '**mach**' resource indicates the **cdev** function cannot run. If your control panel file can run on all Macintosh computers, set the '**mach**' resource to \$FFFF 0000. If your control panel file can run only when certain hardware or software is present, set the '**mach**' resource to \$0000 FFFF. In the latter case, the Finder calls your **cdev** function with the message parameter set to the constant **macDev** (8). Your **cdev** function should then call the **Gestalt** function to determine the software and hardware configuration of the machine. If your control panel file cannot run, return a result code of 0; if your control panel file can run, return a result code of 1. The **Gestalt** function is described in the **Compatibility Guidelines**.
- The Finder now handles the result codes returned by your **cdev** function. Whereas the **Control Panel** dims the icon for a control panel file in response to certain result codes, the Finder displays an error message but does not dim the control panel file icon.

- Under System 7, the 'fwst' resource type is used to allow the Finder to keep track of the position of a control panel window on the screen. When a user opens a control panel, moves its window, and then closes it, a 'fwst' resource is added to the control panel file. This tells the Finder where to place the window next time it is opened. If you scan your resource fork for viruses, you need to know that the sudden appearance of this 'fwst' resource is normal, and not a viral infection or symptom of a damaged resource fork. The other important thing is know is that the 'fwst' takes precedence over the 'nrct' resource, so if you need to change your 'nrct', you must first delete the 'fwst' (using a resource editor such as ResEdit) or your changes will not take effect. Be sure to delete the 'fwst' before shipping your control panel, to allow it to come up in the default position.