

New Technical Notes

Macintosh



Developer Support

“New” cdev Messages Toolbox M.TB.NewCDEVMsg

Written by: Mark Bennett

October 1988

This Technical Note describes some previously undocumented messages that the Control Panel can send to a Control Panel device (cdev).

The Control Panel will send messages to a Control Panel device (cdev) in response to the user selecting the Undo, Cut, Copy, Paste and Clear items of the Edit menu. It will also send a message if the cdev contains a 'CURS' = -4064 resource. The following is a list of the previously undocumented messages, descriptions, and values:

Message	Description	Value
undoDev	Undo selected	9
cutDev	Cut selected	10
copyDev	Copy selected	11
pasteDev	Paste selected	12
clearDev	Clear selected	13
cursorDev	Cursor resource	14

The Control panel only sends the undoDev, cutDev, copyDev, pasteDev, and clearDev messages to a cdev as a result of the Desk Manager sending an edit message to it when an application calls `SystemEdit (_SysEdit)`. Since the call to `SystemEdit (_SysEdit)` is triggered by a mouse-down event in the menu bar, the messages to the cdev will be sent only as a result of the user selecting the Edit menu item with the mouse and not by pressing the Command-key equivalent.

Typically, you will call `_DlgCut`, `_DlgCopy`, `_DlgPaste` or `_DlgDelete` upon receipt of the cutDev, copyDev, pasteDev, or clearDev message, passing the `DialogPtr` that has been passed to the cdev to the call.

To respond to Command-key equivalents of the Edit menu commands, you must check for the specific characters and modifier keys themselves, even though this is never localized.

Once you determine the character to be a Command-key equivalent, you must alter the `what` field of the event record that has been passed to the `cdev` to be a `nullEvent` to prevent the Dialog Manager from inserting the character into the `editText` item of the `cdev`. To alter the event record, you should treat the event record parameter which is passed to the `cdev` as a reference. In Pascal, this means declaring the interface to the `cdev` as follows:

```
FUNCTION MyCdev(message, item, numItems, CPanelID: INTEGER
    VAR theEvent: EventRecord; (* the 'NEW' way *)
    cdevStorage: Handle;
```

```
CPDialog: DialogPtr) : Handle;
```

In C, you would do the following:

```
Handle MyCdev(message, item, numItems, CPanelID
               theEvent, cdevStorage, CPDialog)
short message, item, numItems, CPanelID;
EventRecord *theEvent;    /* the 'NEW' way */
Handle cdevStorage;
DialogPtr CPDialog;
```

In assembly language, it means you do not make your own copy of the event record, so you are probably already set up to change the value of the `what` field of the event record.

If the `cdev` contains a `'CURS'` = -4064 resource, the Control Panel will send it a `cursorDev` message whenever the cursor is over the `cdev` part of the Control Panel's window instead of setting the cursor to the light cross. The `cdev` can then set and use its own cursor. The Control Panel will handle the cursor elsewhere on the screen. The Control Panel does not examine the contents of the `'CURS'` = -4064 resource.

Further Reference:

- Inside Macintosh, Volume V, The Control Panel