

XEROX
BUSINESS SYSTEMS
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XEROX SDD ARCHIVES
I have read and understood
Pages _____ To _____
Reviewer _____ Date _____
of Pages _____ Ref. 28 SDD - 146

To: Irby, Kimball, Richard, Ayers, Newlin, McGregor, Burr
C: Harslem, Reiley, Clark, Abraham, Curry
From: Dave Smith / SD at Palo Alto
Subject: On changing the mouse button semantics to SELECT or SELECT-ADJUST
Filed on: [iris]<star>select-adjust.press

The Desktop has implemented a SELECT one-button mouse and a SELECT-ADJUST two-button mouse scheme as part of its selection prototypes. Based on my usage of all the schemes, those two seem *significantly better* than the others. In particular, the SELECT button has shown itself to be completely sufficient for text editing. The simple expedient of always having an implicit caret at the end of every text selection permits SELECT to supercede all the POINT functions. SELECT alone can do everything SELECT-POINT does, and it is simpler. While these schemes will certainly be functionally tested, it is beginning to seem plausible that we will combine SELECT and POINT into one button.

In view of this, I have been looking at the uses of POINT and how they could change under SELECT. Some of the uses of POINT we can eliminate, some we can simply use the SELECT button keeping the semantics the same, and some we will have to change slightly. The major uses for POINT and their SELECT equivalents are:

(1) Place caret in text

eliminate

exception: We could allow bugging to the left of the first character on a line to place a caret there. Bugging in an empty field would also place a caret, since there is nothing to select (if we adopt Ralph's suggestion for eliminating the special characters).

(2) Invoke menu command, scroll, etc.

use SELECT

(3) Specify destination of MOVE/COPY

use SELECT

(4) Display icon menu

eliminate the icon menu

do OPEN by double clicking SELECT (1st click selects icon, 2nd click opens it)

alternative: click ADJUST on the icon, if there is an ADJUST button

put the commands ENCRYPT, DECRYPT, CONVERT, etc. in the window menu or, even better, in the window menu icon

(5) Display frame menu

use menu icons as in window menu and Message Area

invoke with SELECT as described in the attached pictures

Note that nothing in the above requires the use of a second mouse button. The only reasons for having a second button (ADJUST) are:

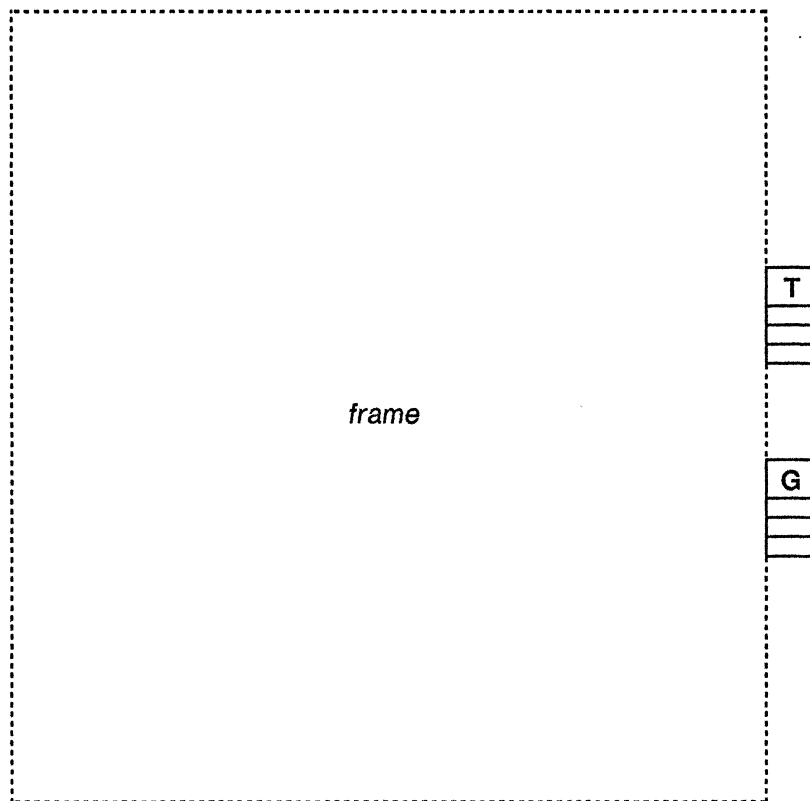
for convenience, if it is determined that adjusting selections is a high frequency task;

to eliminate the Adjust command from the window menu;

for the Deselect function in graphics.

As far as the top row of function keys goes, either of the following two interpretations for them is acceptable to me:

1. The paragraph keys (INDENT, JUSTIFY, CENTER) apply to the entire paragraph(s) containing the selection/caret. The character keys apply to either the selection+caret if there is a selection (there is always an implicit caret), or just to the caret if there is no selection. This implies that when there is a selection, to change the looks of typed text without changing existing text, a space would have to be typed to make the selection go away.
2. The paragraph keys apply to the entire paragraph(s) containing the selection/caret. The character keys apply *only to the caret*. They are, therefore, used only to speed up power typing. Changing the looks of existing characters is done with the property sheet mechanism or with SAME AS or with AGAIN.



*A frame showing associated table and graphics menu icons
indicating additional table and graphics commands.*

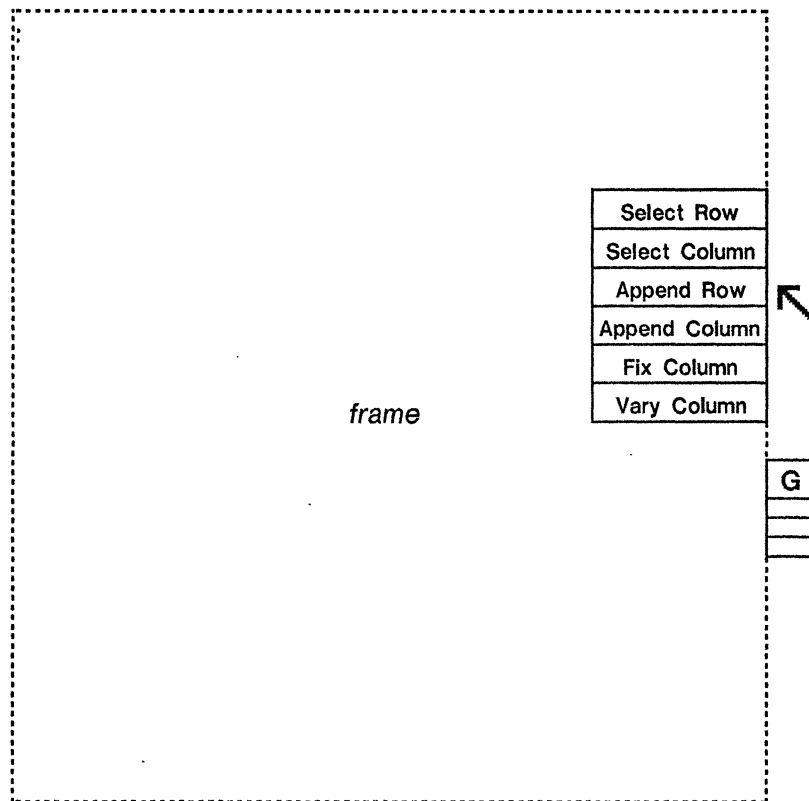
The corresponding menu icon is present only if the frame contains table(s) or graphics.

The menu icons appear only when something in the frame is selected.

(If the frame boundary is off, the dotted boundary also appears.)

Note that there is always a visible indication when more commands exist.

(Menu icons could be universal indications of more commands.)



A frame with the associated table menu expanded.

The menu is displayed by pressing down the SELECT mouse button while the cursor is over the menu icon. The menu remains displayed as long as SELECT is held down.

A command is invoked by moving the cursor into the menu and releasing the mouse button. If SELECT is released while the cursor is outside the menu, the menu simply disappears.

In either case, the menu icon is redisplayed.