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## MODERNIZE

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MODERNIZE is a simple Lispusers package that changes the mouse actions on Medley windows so that moving and shaping can be done in a way that approximates the behavior of windows on modern platforms, Mac, Windows, etc. It also adds some meta keys to emulate more conventional behavior.

Thus, for a window that has been created or transformed in this way, you can move the window by left-clicking in the title bar and dragging the window's ghost region. Or you can reshape by clicking in a corner of the title bar or near the bottom of the window to drag out the ghost region by that corner.

The menu behavior for other buttons or buttons clicked in other positions is unchanged.

For bottom corners, "near" means inside the window within MODERN-WINDOW-MARGIN (initially 25) pixels above or to the left/right of the corner.

For top corners, "near" means within the title bar and within the margin from the left/right edges. (Windows that don't have a title-bar, like Snap windows, can be set up so that moving can happen by clicking anywhere, and shaping at the top is determined by the margin inside the window region.

The function MODERNWINDOW.SETUP establishes the new behavior for classes of windows:

```
(MODERNWINDOW.SETUP ORIGFN MODERNWINDOWFN ANYWHERE TITLEPROPORTION)
```

ORIGFN is either the name of the BUTTONEVENTFN for a class of windows (e.g. \TEDIT.BUTTONEVENTFN for Tedit windows) or it is a function that creates windows of a particulate kind (e.g. SNAPW or ADD-EXEC).

MODERNWINDOW.SETUP moves the definition of ORIGFN to the name (PACK\* 'MODERN-ORIG-ORIGFN). It then provides a new definition for ORIGFN that does the window moving or reshaping for clicks in the triggering locations, and otherwise passes control through to the original definition.

If ORIGFN is a button event function, then MODERNWINDOWFN should not be specified. In that case a new definition for ORIGFN is constructed to provide the desired windowing behavior.

Otherwise, if ORIGFN is the function that creates windows of a class (e.g. SNAPW), then a MODERNWINDOWFN should be provided to create such windows (by calling (PACK\* 'MODERN-ORIG-ORIGFN)). The definition of MODERNWINDOWFN replaces the original definition of ORIGFN.

TITLEPROPORTION may be a number between 0 and .5. It specifies the proportion from either edge of the title bar where clicks will be interpreted as window operations. For example, if TITLEPROPORTION is .25, then a title click that is up to a quarter of the way from the left or right edge of the window will trigger the moving operation. Clicks in the middle 50% of the title bar will always pass through.

If the flag ANYWHERE is non-NIL, especially for windows without a title bar, then the moving behavior is triggered by a click anywhere in the window (except the corners).

Because this works by redefining existing functions, it is important that the `MODERNIZE` package be loaded AFTER Tedit and Sedit, if those are not already in the sysout. And it should be called to upgrade the proper functions for other window classes that might later be added.

Provided these capabilities are already loaded, the following window classes are "modernized" when `MODERNIZE` is loaded:

```
TEDIT
SEdit
INSPECTOR
SNAP
DEBUGGER
EXEC
TABLEBROWSER
FILEBROWSER
FREEMENU
GRAPHER
PROMPTWINDOW
SPY
TOTOPW
```

If it is not known or it is inconvenient to systematically upgrade a button function or a window-creation function, the new behavior can be provided after a particular window has been created, by invoking

```
(MODERNWINDOW WINDOW ANYWHERE TITLEPROPORTION)
```

This saves the windows existing `BUTTONEVENTFN` as a window property `PREMODERN-BUTTONEVENTFN`, and installs a simple stub function in its place.

If things go awry:

```
(UNMODERN.SETUP ORIGFN
```

is provided to restore the original behavior for windows whose `buttonevent` function is `ORIGFN`.

```
(UNMODERNWINDOW WINDOW)
```

restores a modernized window to its original state.

`MODERNIZE` also augments the Tedit keyboard commands, to increase compatibility with modern interfaces:

```
Meta,q is a synonym for Quit
Meta,a is a synonym for Select All
```

## Known issues:

Clicking at the bottom of an `EXEC` window running `TTYIN` is effective only when the input line is empty.