NEATICONS

By: Peter Schachte (quintus!pds@Sun.com)

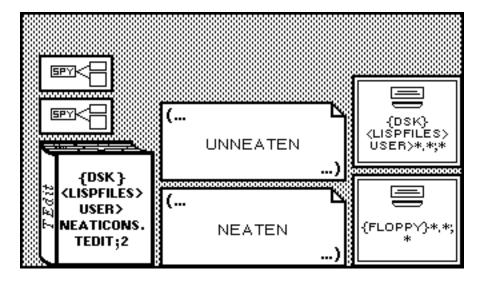
INTRODUCTION

If you like to keep your icons neatly arranged on your screen, NEATICONS is for you. After this package is loaded, whenever an icon is created by shrinking a window, that icon will be "neat." But what *is* a neat icon? A neat icon is one that is lined up with with another icon or window, or the edge of the screen. The easiest way to see this is to load the package, shrink a few windows (creating a snapshot and shrinking it is easy), and move them around. When a neat icon is moved near another icon or window or the edge of the screen, it is "grabbed" and moved neatly near it.

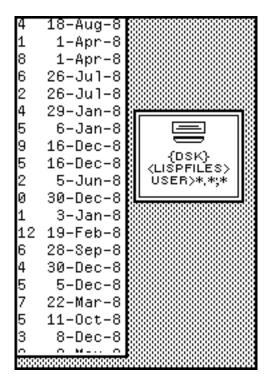
Neat icons line themselves up in a variety of ways. They will flush themselves with the edge of the screen. They will move themselves a fixed number of pixels from the edge of another window. Or they will align one of their edges with the corresponding edge of another window. When you move a neat icon, it will try to find a "neat" position near where you placed it, and place the window there instead. It may find a nearby position that is horizontally neat but not vertically, or vice versa. In any case, it will move the window into the nearest neat position it can find, or leave it where you put it if it can't find any nearby neat places.

EXAMPLES

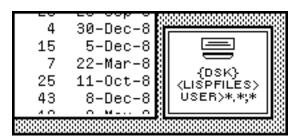
Here are a few examples of how your icons will be arranged. A typical cluster of neat icons:



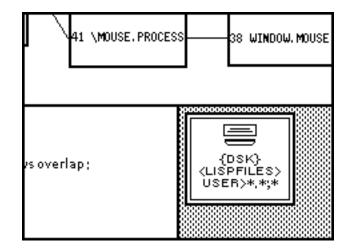
Neat icons can align themselves with the side of a window:



But more typically, they will align themselves with the corner of a window:



And they occasionally align themselves near the corner where two windows overlap:



DETAILS

You can just load this module and forget about it, and it will behave as advertised. It does have two user-settable parameters, and two user-callable functions, however. These are documented below.

Please note that the NEATICONS module is contained entirely in the NEATICONS package. This package exports the following symbols.

How near is near?

NEATICONS:DEFAULT-TOLERANCE

[Variable]

This global parameter determines how many pixels vertically and horizontally an icon will be moved in order to make it neat. This defaults to 100.

Spacing between icons

NEATICONS:DEFAULT-SPACING

[Variable]

This global parameter determines how many pixels apart neat icons will be placed. The default is 5.

Making a window neat

Loading the NEATICONS module causes SHRINKW to be advised, so every time a window is shrunk, the icon is made neat. So icons created before you load NEATICONS will not be neat, but they can be made neat by expanding and then re-shrinking them.

But suppose you want to make a regular window neat?

(NEATICONS:NEATEN &OPTIONAL WINDOW)

[Function]

makes WINDOW neat. WINDOW defaults to (WHICHW), so you can point at a window with the mouse and type (NEATICONS:NEATEN).

Making a window sloppy

(NEATICONS:UNNEATEN &OPTIONAL WINDOW)

[Function]

makes WINDOW no longer neat. It behaves just like a normal, sloppy, vanilla window. WINDOW defaults to (WHICHW).

Other MOVEFNs

The NEATICONS module uses each window's MOVEFN prop. If you wish to have another MOVEFN on a neat window, you can. If a window has MOVEFN when it is NEATICONS:NEATENed, it will be preserved. If you wish to add a MOVEFN to an existing neat window, you should put it on the window's

NEATICONS:USERMOVEFN

[Window Prop]

prop. This prop should hold a list of functions. When a neat window is moved, first it finds the nearest neat place. Then the first function on the window's NEATICONS:USERMOVEFN prop is called with the neat position as argument. If this function returns IL:DON'T, the window won't be moved. If it returns NIL, the position argument it was passed is passed to the second function on the list. If it returns a position, this position is passed to the second function on the list. The result of each function on the list is treated similarly, until all the functions have been called. The latest position is used as the position to move the window to.