

# Where did windows minimize to before the taskbar was invented?

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Before Explorer was introduced in Windows 95, the Windows desktop was a very different place.

The icons on your desktop did not represent files; rather, when you minimized a program, it turned into an icon on the desktop. To open a minimized program, you had to hunt for its icon, possibly minimizing other programs to get them out of the way, and then double-click it. (You could also Alt+Tab to the program.)

Explorer changed the desktop model so that icons on your desktop represent objects (files, folders) rather than programs. The job of managing programs fell to the new taskbar.

But where did the windows go when you minimized them?

Under the old model, when a window was minimized, it displayed as an icon, the icon had a particular position on the screen, and the program drew the icon in response to paint messages. (Of course, most programs deferred to `DefWindowProc` which just drew the icon.) In other words, the window never went away; it just changed its appearance.

But with the taskbar, the window really does go away when you minimize it. Its only presence is in the taskbar. The subject of how to handle windows when they were minimized went through several iterations, because it seemed that no matter what we did, some program somewhere didn't like it.

The first try was very simple: When a window was minimized, the Windows 95 window manager set it to hidden. That didn't play well with many applications, which cared about the distinction between minimized (and visible) and hidden (and not visible).

Next, the Windows 95 window manager minimized the window just like the old days, but put the minimized window at coordinates (-32000, -32000), This didn't work because some programs freaked out if they found their coordinates were negative.

So the Windows 95 window manager tried putting minimized windows at coordinates (32000, 32000), This still didn't work because some programs freaked out if they found their coordinates were positive and too large!

Finally the Windows 95 window manager tried coordinates (3000, 3000), This seemed to keep everybody happy. Not negative, not too large, but large enough that it wouldn't show up on the screen (at least not at screen resolutions that were readily available in 1995).

If you have a triple-monitor Windows 98 machine lying around, you can try this: Set the resolution of each monitor to 1024×768 and place them corner-to-corner. At the bottom right corner of the third monitor, you will see all your minimized windows parked out in the boonies.

(Windows NT stuck with the -32000 coordinates and didn't pick up the compatibility fixes for some reason. I guess they figured that by the time Windows NT became popular, all those broken programs would have been fixed. In other words: Let Windows 95 do your dirty work!)

[Raymond is currently on vacation; this message was pre-recorded.]

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