

# Why doesn't the clock in the taskbar display seconds?

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 [devblogs.microsoft.com/oldnewthing/20031010-00](http://devblogs.microsoft.com/oldnewthing/20031010-00)

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Early beta versions of the taskbar clock did display seconds, and it even blinked the colon like some clocks do. But we had to remove it.

Why?

Because that blinking colon and the constantly-updating time were killing our benchmark numbers.

On machines with only 4MB of memory (which was the minimum memory requirement for Windows 95), saving even 4K of memory had a perceptible impact on benchmarks. By blinking the clock every second, this prevented not only the codepaths related to text rendering from ever being paged out, it also prevented the taskbar's window procedure from being paged out, plus the memory for stacks and data, plus all the context structures related to the Explorer process. Add up all the memory that was being forced continuously present, and you had significantly more than 4K.

So out it went, and our benchmark numbers improved. The fastest code is code that doesn't run.

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