Did Windows 95 shrink the default font size of windowed MS-DOS apps?

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The article <u>Running DOS Apps on Windows</u> observed that in Windows 95, the default font for windowed MS-DOS sessions was 6×8, compared to 8×12 in Windows 3.1. Why did the font size change?

Technically, the font size did not change from 8×12 to 6×8. What happened is that the font size changed from 8×12 to *Auto*.

The *Auto* font size means "Choose the largest font that avoids scroll bars." You can grab the MS-DOS window and resize it, and the font size will adjust with the size of the window.

These are MS-DOS sessions and not virtual consoles. There is no backscroll. The MS-DOS session thinks that it is talking to a video card, and it programmed the video controller into a specific text mode, say 80×25. The number of rows and columns are fixed. If you resized the window bigger, you didn't get more rows of text. There is no text to show!

Windows 3.1 wouldn't let you resize an MS-DOS session larger than the font size times the character size, so if you had an 80×25 MS-DOS session with an 8×12 font, you could resize the window up to $(80\times8)\times(25\times12)=640\times300$. It wouldn't go any bigger, and if you went smaller, you got scroll bars. If you look closely at the screen shots of MS-DOS apps running in a window on Windows 3.0, you'll see a horizontal scroll bar.

The default size of a window in Windows 3.0 and Windows 95 is $\frac{3}{4}$ of the height and $\frac{3}{4}$ of the width of the screen. For a 640×480 screen, that comes out to 480×360, which is too narrow for an 8×12 font, but is sufficient for a 6×8 font, which requires 480×200 pixels.

Windows 95 felt that it was ugly to open an MS-DOS prompt and immediately show scroll bars, so it defaulted to auto-choosing the largest font available provided it didn't produce scroll bars. The default font on Windows 95 therefore varies with your screen size. If you are running at 640×480, then you get 6×8. But if you are running at 1024×768 (which was more common), the default window size is 768×587, which will accommodate an 8×12 font.

Sometimes people observe that Windows 98 opened MS-DOS prompts with a larger font than Windows 95. But really what happened between Windows 95 and Windows 98 has nothing to do with default fonts. What happened is that you got a bigger monitor!