

640 x 480 is still not dead

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Windows still has to worry about displays running at 640×480 resolution. Even though the default minimum resolution was bumped up to 800×600 for Windows XP, there are still 640×480 devices out there, typically tiny monitors on servers. One common set-up is to have a bank of tiny little monitors, each corresponding to one server in a cluster, with one large monitor that can “tap into” any of the tiny monitors for a closer look. Even though these servers typically are managed via remote administration, keeping actual monitors available acts as a safety net when remote administration proves insufficient, for example, if there is a networking problem. I don’t know what the minimum video requirements will be for Vista, but I doubt they’ll really affect these types of machines. These server monitors are not interested in any fancy new video features like Aero Glass or desktop composition. Running at 640×480 is not just for these server monitors, though. I believe Safe Mode runs at 640×480, so Explorer still needs to be usable at that resolution. This has design consequences, for it means that every component of the interface that a user might need when in Safe Mode (such as the Start menu, Explorer windows, Add or Remove Programs, possibly Windows Update I’m not sure) needs to remain usable under such low resolutions. For the Start menu, for example, this means making sure that the default Start menu will still fit on the screen even at 640×480. You might respond, “Well, that’s stupid, letting this 640×480 limitation cramp your design. You should design for a high-resolution display, say something that is 1024×768 or greater, and have a special ‘Safe Mode’ version of the interface that runs in 640×480 for the cases where you have to squeeze into a smaller space.” This approach has two drawbacks. First, it means that there are two versions of the user interface that have to be designed, implemented, and tested. The amount of work is disproportional to the benefit, since Safe Mode is used less than one tenth of one percent of the time (and that’s probably grossly over-estimating). If you were in a position to decide where user interface resources should be spent, would you spend it on a special Safe Mode interface, or would you rather spend it on making the Aero interface even more solid?

The second problem with a special Safe Mode interface is that, well, it’s a special Safe Mode interface. When the user boots into Safe Mode, they’re already anxious. Their computer doesn’t work; they’re trying to fix it. And then they boot up and are faced with a new interface that they’re not familiar with. This doesn’t do much to calm their anxiety.

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