Why isn’t the screen resolution a per-user setting?

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Via the suggestion box, Dominic Self asks why screen resolution is a global setting rather than a per-user setting. Well, first of all, it’s not even a global setting. It’s a session setting.

That it’s not a global setting is not readily apparent most of the time since only Windows Terminal Server is set up to support multiple simultaneous interactive sessions. On Windows Terminal Server, you specify the properties of the virtual monitor you wish to connect with, including resolution, and the server accommodates your wishes. Well, up to a point. I mean if you ask for a 1,000,000×1,000,000 pixel screen, the server is probably going to say “As if!” (The Remote Desktop Connection feature found in, for example, Windows Vista Ultimate is basically the same thing, but on a smaller scale.)

You can have ten different people logged on, each using a different video configuration. Some users might be running at lowly 640×480, others at 800×600 and still others at 1024×768. Some of them are running in 16-color mode, others 8-bit color, and some really adventuresome people with a lot of network bandwidth running at 24-bit color. You can even have the same user logged on more than once, with each session running at a different screen resolution.

If the resolution settings really were per-user, you’d have some conflict resolution to deal with. If a user logs on and specifies a resolution different from the one stored in the user profile, does the new resolution overwrite the existing one? Or is the new resolution just a temporary resolution and the original one should stay? If a user tries to log on a second time with a conflicting resolution, is the second resolution ignored? Does the second resolution force the first session to change its resolution? Do you just get two sessions running with different resolutions? Which one gets saved as the user’s preferred resolution?

You also have to come up with a way to customize the resolution of the screen when nobody is logged on, a way to reconcile the effect of roaming profiles, what happens if you do a Run As on a user whose screen resolution conflicts with the user who opened the session.

I'm not saying that these problems can't be solved. They probably can, given enough thought, but not all of the solutions will please everybody all the time, because no matter what you do, somebody will tell you that you're an idiot. And think of all the time and effort necessary to design how the feature should work, nail all the boundary conditions ("What happens if your per-user setting conflicts with an administrative policy?"), then code it up, write automated tests for it, run it through usability exercises ("Does the behavior match what users intuitively expect?" The answers may surprise you.) write up the documentation and help text, and continue maintaining the code, tests, and documentation for the feature's anticipated lifetime (which in this case is probably *forever*). Could all those resources have been spent on something that would have a greater total benefit to the customer base? (The answer to that is always "Yes"—everybody and her sister-in-law can find a way to finish the sentence, "I can't believe they wasted all that time on this stupid feature instead of fixing…")

Remember, every feature starts with minus 100 points.

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