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Subject: Re: Native DPI

Posted by [Tom1](#) on Wed, 17 Jun 2015 08:02:22 GMT

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Hi,

Sorry, my explanation on "hidpi aware" flag vs. "display zoom percentage" was misleading even to my self after six hours of sleep... Let's try again:

- When "Hidpi aware" flag is set, the coordinates on the Ctrl are equal to physical pixel coordinates. When not set, the Ctrl exposes logical coordinates, which are automatically mapped to physical pixel coordinates (and back) internally in upp according to "display zoom percentage". This will enable compatibility for existing (non-hidpi-aware) Ctrls.

- The "hidpi aware" Ctrls will need additional support from upp to scale their content correctly themselves. This additional support should include a function call to retrieve current display zoom percentage and a function call to retrieve current StdFontSize. Both are needed to get clean results.

In Windows the default font size can be adjusted separately. Please take a look at Control Panel > All Control Panel Items > Display: There you can see "Change the size of all items". The Smaller/Larger -slider changes the Windows reported "DPI". Additionally, on the same page you can see "Change the text size only". A pair of drop lists is used to adjust font size for different text items. It seems TheIDE uses the font size derived from "Menus" font size.

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When I wrote: "Any which way it is, I would prefer having the framework supporting any scaling levels with fine granularity. While icons may cleanly only be scaled to 1x, 2x, 3x, etc., many other aspects of GUI can benefit from greater granularity.", I meant: "Hidpi aware" Ctrls should have access to the current "display zoom percentage" value in order to be able to scale their contents equally cleanly for any display zoom percentage (100/125/150/200%). Scaling to just 1x, 2x, 3x... is not enough.

Best regards,

Tom

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