How do IsThemeActive, IsAppThemed, and IsCompositionActive differ?

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There are three functions which test very similar things, and sometimes applications pick the wrong one. Here's the rundown:

- `IsThemeActive` checks whether visual styles are enabled for the user. This is not an application-specific setting; it tells you whether visual styles are enabled in general. Note that this does not tell you whether the current application is using visual styles.
- `IsAppThemed` checks whether visual styles are enabled for the current application. Windows may disable visual styles for a specific application (even though they are enabled in general) for compatiblity reasons.
- `IsCompositionActive` checks whether desktop composition is enabled for the current application. As with visual styles, Windows may disable desktop composition for a specific application (even though it is enabled in general) for compatiblity reasons.

Note that these functions do not answer the question "Is the application using the visual-styles-enabled version of the common controls library?" That question is harder to answer because the decision to use the visual-styles-enabled version of the common controls library is not a process-wide one but is rather made on a window-by-window basis. You can have an application where half of the button controls are the old non-visual-styles version and half of the button controls participate in visual styles. (You may have seen this in action in Explorer, where the OK button on the *Run* dialog participates in visual styles, yet a button in a shell extension does not.) How can you tell whether a particular button is an old-school button or a fancy new button? I don't know either.

Bonus emphasis: From the comments, it appears that people have confused "a window was created with the visual-styles-enabled version of the common controls library" with "themes are enabled". The two are independent concepts. All four combinations are possible. I thought I called this out in the article, but apparently I didn't call it out clearly enough.

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