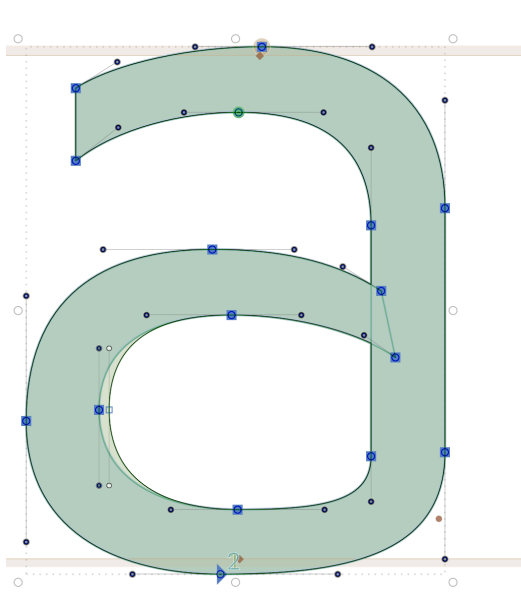


Diffenator2 uses FreeType glyph bitmaps which are then pixel diffed. I have found that 3 pixels per an em (PPEM) is a sufficient size which captures enough information for example:

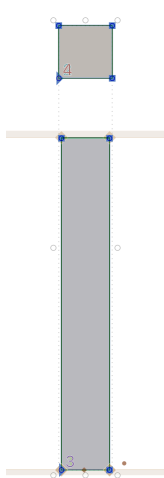


Here are two overlaid glyphs. One has a counter which is 10 units wider than the other. Such a change would be noticeable to a type designer (A regular user may struggle to spot it). If we take the two bitmap arrays and diff them, we end up with:

[0, 3, 0, 0, 0, 0]

*0=no changed pixels. Max value is 255 so 3 is pretty small*

So even diffing bitmaps at 3ppem, we can catch fairly small modifications. Can we go even smaller? Yes we can:



This example uses the lowercase “i” where there’s only a 2 unit difference between the stem height. Diffenator produces the following diff array:

[0, 1]

Unless you're Hermann Zapf, you are not going to see this.

Diffenator2 will have an option which will filter the results so the above "i" example isn't visible. However, we shouldn't enable it by default since it's still useful to see all changes since it adds a sense of security when diffing popular families such as Roboto and NDA projects.