
Subject: Painter Text Underline/Strikeout not working

Posted by [Tom1](#) on Fri, 30 Dec 2016 09:18:59 GMT

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Hi Mirek,

Underline and Strikeout font features do not work with `Painter::Text()`. I found that `Painter::DrawTextOp()` adds these features after calling `Text()` to support these.

While I need the path of the text, I can't use `DrawTextOp`.

Is there any reason to not move the Underline/Strikeout code from `DrawTextOp()` to `Text()` to fully support the selected font features?

Best regards,

Tom

Subject: Re: Painter Text Underline/Strikeout not working

Posted by [Tom1](#) on Fri, 30 Dec 2016 10:05:19 GMT

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Hi,

In fact, as far as I can see, it only requires this addition in `Painter.cpp` in the end of `Painter::TextOp()`:

```
if(fnt.IsUnderline()||fnt.IsStrikeout()) {
    int a = fnt.GetAscent();
    int cy = max(a / 16, 1);
    if(fnt.IsUnderline()) Rectangle(0, a + cy, x, cy);
    if(fnt.IsStrikeout()) Rectangle(0, 2 * a / 3, x, cy);
}
```

And removal of this in `DrawOp.cpp` from `Painter::DrawTextOp()`:

```
/* if(font.IsUnderline()) {
    if(IsNull(cx))
        cx = GetTextSize(text, font).cx;
    int a = font.GetAscent();
    int cy = max(a / 16, 1);
    Rectangle(0, a + cy, cx, cy);
    Fill(ink);
}
if(font.IsStrikeout()) {
    if(IsNull(cx))
```

```
    cx = GetTextSize(text, font).cx;  
    int a = font.GetAscent();  
    int cy = max(a / 16, 1);  
    Rectangle(0, 2 * a / 3, cx, cy);  
    Fill(ink);  
}  
*/
```

Can you merge this change?

Best regards,

Tom

Subject: Re: Painter Text Underline/Strikeout not working

Posted by [mirek](#) on Sun, 01 Jan 2017 20:33:06 GMT

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The reason is that I wanted Text to render the vector shape that is in the font. Strikeout / Underline are not there...

Do you really need that for something?

Mirek

Subject: Re: Painter Text Underline/Strikeout not working

Posted by [Tom1](#) on Mon, 02 Jan 2017 08:28:32 GMT

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Hi Mirek,

In fact I do need it: When rendering maps, I use underlining for marking text objects selected for editing or processing. Additionally, I plan to use strikeout for marking text objects that are selected for deletion.

Logically, I think while underline/strikeout are not part of Character(), they still are part of Text(). After all, these are valid Font properties and the most logical and efficient location for rendering them is right there in Text(). They should not hurt anybody not using them at the cost of one if statement. Strikeout/Underline are disabled by default and only voluntarily enabled in a Font.

If this cannot be included, I can of course use external code for the purpose (similar to what is found in DrawTextOp()), which is a bit slower since it needs to calculate the width of the string redundantly.

You choose

Thanks and best regards,

Tom

Subject: Re: Painter Text Underline/Strikeout not working

Posted by [mirek](#) on Mon, 02 Jan 2017 08:56:49 GMT

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OK, patch applied.

Mirek

Subject: Re: Painter Text Underline/Strikeout not working

Posted by [Tom1](#) on Mon, 02 Jan 2017 09:09:47 GMT

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Thanks Mirek!

// Tom

Subject: Re: Painter Text Underline/Strikeout not working

Posted by [Tom1](#) on Tue, 03 Jan 2017 08:12:28 GMT

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Hi Mirek,

One more thing. I noticed that "int cx = Null;" and all references to cx can now be removed from the Painter/DrawOp.cpp Painter::DrawTextOp() to further optimize the code. Sorry for waking up late on this.

Thanks and best regards,

Tom

Subject: Re: Painter Text Underline/Strikeout not working

Posted by [Tom1](#) on Mon, 16 Jan 2017 09:38:52 GMT

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Hi,

Here's one more fix for the Painter::TextOp() in Painter.cpp:

```

void Painter::TextOp(const Pointf& p, const wchar *text, Font fnt, int n, const double *dx)
{
    if(n == 0) {
        Move(0, 0);
        return;
    }
    FontInfo fi = fnt.Info();
    double x = p.x;
    while(n) {
        int ch = *text++;
        Character(x, p.y, ch, fnt);
        Div();
        if(dx)
            x += *dx++;
        else
            x += fi[ch];
        n--;
    }
    if(fnt.IsUnderline() || fnt.IsStrikeout()) {
        int a = fnt.GetAscent();
        int cy = max(a / 16, 1);
        if(fnt.IsUnderline())
            Rectangle(p.x, p.y + a + cy, x, cy);
        if(fnt.IsStrikeout())
            Rectangle(p.x, p.y + 2 * a / 3, x, cy);
    }
}

```

The underline and strikeout did not follow the Pointf &p parameter, which they obviously should have. This is fixed now above. Please commit.

Best regards,

Tom

Subject: Re: Painter Text Underline/Strikeout not working
 Posted by [mirek](#) on Mon, 16 Jan 2017 10:19:11 GMT
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Thanks, applied

Subject: Re: Painter Text Underline/Strikeout not working
 Posted by [Tom1](#) on Tue, 17 Jan 2017 08:20:04 GMT

Hi Mirek,

Sorry to waste your time with stupid mistakes I make. I sincerely hope this is my final update for Painter.cpp Painter::TextOp() :

```
...
if(fnt.IsUnderline() || fnt.IsStrikeout()) {
    int a = fnt.GetAscent();
    int cy = max(a / 16, 1);
    int cx = x - p.x;
    if(fnt.IsUnderline())
        Rectangle(p.x, p.y + a + cy, cx, cy);
    if(fnt.IsStrikeout())
        Rectangle(p.x, p.y + 2 * a / 3, cx, cy);
}
```

Thanks and best regards,

Tom

Subject: Re: Painter Text Underline/Strikeout not working

Posted by [mirek](#) on Tue, 17 Jan 2017 08:38:08 GMT

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Missed that one. However, looking at the code (and compiler warnings), should not these 'int's be really 'double's?

```
if(fnt.IsUnderline() || fnt.IsStrikeout()) {
    double a = fnt.GetAscent();
    double cy = max(a / 16, 1.0);
    double cx = x - p.x;
    if(fnt.IsUnderline())
        Rectangle(p.x, p.y + a + cy, cx, cy);
    if(fnt.IsStrikeout())
        Rectangle(p.x, p.y + 2 * a / 3, cx, cy);
}
```

Maybe even that 'max' is not really needed...

(Committing with doubles, for now)

Subject: Re: Painter Text Underline/Strikeout not working

Posted by [Tom1](#) on Tue, 17 Jan 2017 09:55:09 GMT

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I agree, double is better than int. Also, cy looks just fine at a/16 without max(). However, if MODE_NOAA is used, using max() would seem reasonable to guarantee visibility of underline/strikeout for small font sizes. Otherwise, they may just disappear at e.g. 10 pts font size.

Best regards,

Tom

Subject: Re: Painter Text Underline/Strikeout not working

Posted by [mirek](#) on Tue, 17 Jan 2017 15:09:56 GMT

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Tom1 wrote on Tue, 17 January 2017 10:55I agree, double is better than int. Also, cy looks just fine at a/16 without max(). However, if MODE_NOAA is used, using max() would seem reasonable to guarantee visibility of underline/strikeout for small font sizes. Otherwise, they may just disappear at e.g. 10 pts font size.

Best regards,

Tom

OK, max it is then...

Mirek
