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

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...

(Commiting with doubles, for now)

Subject: Re: Painter Text Underline/Strikeout not working
Posted by Tom1 on Tue, 17 Jan 2017 09:55:09 GMT

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

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