
Subject: RichEdit and styles questions

Posted by [koldo](#) on Sat, 23 May 2009 22:36:04 GMT

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Hello all

First question

Using UWord demo it is not possible to set one line with more than one style, but if I change the QTF file by hand, UWord opens the file properly:

Do you know if it is possible to do this directly in UWord or by adding something?

Second question

I would like to parse the RichEdit text but focusing in the styles. For example text with "Default" style would be copied unchanged but text with "Formula" style would be converted into a mathematical formula, like converting:

Quote: $\int (\sqrt{\cos(\phi_i)} + i^2 + 6, i = 1, 10) dx = \cos((27+x^2)^{3.25}) / (\pi R_0^2)$

in the equivalent formula:

Do you know how to do this "the simple way" instead of parsing directly the QTF bytes?.

Best regards

Koldo

File Attachments

1) [window.JPG](#), downloaded 1248 times

2) [math.JPG](#), downloaded 1251 times

Subject: Re: RichEdit and styles questions

Posted by [mirek](#) on Mon, 25 May 2009 15:26:29 GMT

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koldo wrote on Sat, 23 May 2009 18:36Hello all

First question

Using UWord demo it is not possible to set one line with more than one style, but if I change the QTF file by hand, UWord opens the file properly:

I am afraid not really.

The problem is that it is PARAGRAPH style...

Quote:

Second question

I would like to parse the RichEdit text but focusing in the styles. For example text with "Default" style would be copied unchanged but text with "Formula" style would be converted into a mathematical formula, like converting:

Quote: $\int \sqrt{\cos(\phi_i^2)} + i^2 + 6, i = 1, 10) dx = \cos((27+x^2)^{3.25}) / (\pi R_0^2)$

in the equivalent formula:

Do you know how to do this "the simple way" instead of parsing directly the QTF bytes?.

Simple (and I believe correct) way is to do is as RichObject. Do not mix with text...

BTW, nice formula renderer

Mirek

Subject: Re: RichEdit and styles questions

Posted by [koldo](#) on Mon, 25 May 2009 16:44:56 GMT

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Hello luzr

Sorry, I am going to explain it better.

The idea I had is to insert equations in Qtf text using a "poor man" approach. Instead of creating a full featured equation editor (perhaps some day) I thought to insert the text and equations in text following certain format, but selecting with a "Formula" style the formulas.

This way the text could look like this.

After pushing a button the user could choose the view mode, so the equation and text before could look like this:

There is no problem to view the equation as I did a QtfRichObject for equations so a program to show a prompt with that equation would be like this:

```
GUI_APP_MAIN
{
    QtfRichObject drw = QtfEquation("integral(sqrt(cos(phi_ini^2)) + i^2 + 6, i = 1, 10)*dx");
    String text;
    text << "[R3 This is some formula in QTF:&" << drw;
    PromptOK(text);
}
```

Code is here: <http://www.ultimatepp.org/forum/index.php?t=msg&&th=4214&goto=20264>

But for doing that I need to parse the Qtf text looking for "Formula" style and changing that text with the QtfRichObject representing the equations.

The question was about how to parse the Qtf the smart way.

Ah, the parser in QtfEquation was borrowed from U++ .

Sorry again. I do not understand what do you mean:

Quote:The problem is that it is PARAGRAPH style...

(I have done the first bitmap Before.jpg by modifying the Qtf file by hand)

Best regards
Koldo

File Attachments

- 1) [Before.JPG](#), downloaded 1148 times
 - 2) [After.JPG](#), downloaded 1148 times
-

Subject: Re: RichEdit and styles questions
Posted by [mirek](#) on Mon, 25 May 2009 20:02:15 GMT
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koldo wrote on Mon, 25 May 2009 12:44Hello luzr

Sorry, I am going to explain it better.

The idea I had is to insert equations in Qtf text using a "poor man" approach. Instead of creating a full featured equation editor (perhaps some day) I thought to insert the text and equations in text following certain format, but selecting with a "Formula" style the formulas.

Well, the equation of text can be the content of your RichObject. I believe that is the most simple

approach.

RichObjects can be edited and you can add "Insert equation" button. Both will lead to "editor" where you just edit the text and perhaps see the preview.

Quote:

Quote:The problem is that it is PARAGRAPH style...

(I have done the first bitmap Before.jpg by modifying the Qtf file by hand)

Yes, but it is sort of bug (it is "undefined" to use style for just part of paragraph). In any case, RichText would not work with such thing correctly no matter what (because style is remembered only one per whole paragraph).

Mirek

Subject: Re: RichEdit and styles questions
Posted by [koldo](#) on Tue, 26 May 2009 06:59:00 GMT
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Hello luzr

luzr wrote on Mon, 25 May 2009 22:02koldo wrote on Mon, 25 May 2009 12:44Hello luzr

Sorry, I am going to explain it better.

The idea I had is to insert equations in Qtf text using a "poor man" approach. Instead of creating a full featured equation editor (perhaps some day) I thought to insert the text and equations in text following certain format, but selecting with a "Formula" style the formulas.

Well, the equation of text can be the content of your RichObject. I believe that is the most simple approach.

RichObjects can be edited and you can add "Insert equation" button. Both will lead to "editor" where you just edit the text and perhaps see the preview.

Sorry. I do not understand you

One thing I liked was to parse Qtf, so to parse this:

that is this in Qtf format:

```
[ $$0,0#00000000000000000000000000000000:Default]
[$(255.255.192) $$1,1#705B135C58F979E6FF526087DA632601:Formula]
[{\_}%EN-US
[s0; This is the explanation around the formula&]
[s0; &]
[s1; integral(sqrt(cos(phi`_ini`^2)) `+ i`^2 `+ 6, i `= 1, 10)`dx&]
[s0; &]
```

I have two options:

1. Parse this Qtf string looking for "Formula" style paragraphs and substitute them with the rendered formulas (if the user has pressed preview button)
2. Other smarter option

Do you know if there is an option like the smarter option?

Best regards

Koldo

File Attachments

1) [Formula.JPG](#), downloaded 1205 times

Subject: Re: RichEdit and styles questions

Posted by [mirek](#) on Tue, 26 May 2009 08:23:19 GMT

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koldo wrote on Tue, 26 May 2009 02:59Hello luzr

luzr wrote on Mon, 25 May 2009 22:02koldo wrote on Mon, 25 May 2009 12:44Hello luzr

Sorry, I am going to explain it better.

The idea I had is to insert equations in Qtf text using a "poor man" approach. Instead of creating a full featured equation editor (perhaps some day) I thought to insert the text and equations in text following certain format, but selecting with a "Formula" style the formulas.

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[s0; &]
[s1; integral(sqrt(cos(phi`_ini`^2)) `+ i`^2 `+ 6, i `= 1, 10)`dx&]
[s0; &]
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I have two options:

1. Parse this Qtf string looking for "Formula" style paragraphs and substitute them with the rendered formulas (if the user has pressed preview button)
2. Other smarter option

Do you know if there is an option like the smarter option?

Best regards
Koldo

Ah, I see, you not only want to enter formulas in RichEdit, but also in "manual" QTF, right?

Well, I agree, this would be a bit harder because RichObjects are usually quite "compressed".

Anyway, quite easier fix would be to introduce "text based RichObject" format in QTF, what do you thing?

Say

```
[ $$0,0#00000000000000000000000000000000:Default]
[$(255.255.192) $$1,1#705B135C58F979E6FF526087DA632601:Formula]
[{}%EN-US
[s0; This is the explanation around the formula&]
[s0; &]
[s1; @formula integral(sqrt(cos(phi`_ini`^2)) `+ i`^2 `+ 6, i `= 1, 10)`dx@&]
[s0; &]
```

(would need more tuning I suspect...)

Mirek

Subject: Re: RichEdit and styles questions
Posted by [koldo](#) on Tue, 26 May 2009 08:49:40 GMT
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Hello luzr

Quote:Anyway, quite easier fix would be to introduce "text based RichObject" format in QTF, what do you thing?

```
[ $$0,0#00000000000000000000000000000000:Default]
[{}%EN-US
[s0; This is the explanation around the formula&]
[s0; &]
[s0; @formula integral(sqrt(cos(phi`_ini`^2)) `+ i`^2 `+ 6, i`= 1, 10)`dx@&]
[s0; &]
```

For me it would be a very good solution.

I think it would be needed for the user:

- A way to define a new object
- A way to give RichEdit a renderer for that object
- A way to give Richedit a callback function so that if somebody does a double-click on the object this function can open an equation editor in this case (or a picture editor in case of a picture)
- A way to update that object text so that after being edited by the callback function, it can be updated in the RichEdit.

In the sample I have removed "Formula" style as with "formula" object it would be enough.

Best regards
Koldo

Subject: Re: RichEdit and styles questions
Posted by [koldo](#) on Sat, 30 May 2009 22:28:15 GMT
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Sorry Mirek

What is your opinion about this?

Best regards
Koldo

Subject: Re: RichEdit and styles questions
Posted by [mirek](#) on Sun, 31 May 2009 21:22:23 GMT
[View Forum Message](#) <> [Reply to Message](#)

koldo wrote on Sat, 30 May 2009 18:28 Sorry Mirek

What is your opinion about this?

Best regards
Koldo

I agree, but I have not implemented this yet....

Mirek

Subject: Re: RichEdit and styles questions
Posted by [mirek](#) on Tue, 02 Jun 2009 22:01:00 GMT
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Implemented and documented as "RichTextObject" example.

Subject: Re: RichEdit and styles questions
Posted by [koldo](#) on Thu, 04 Jun 2009 06:57:24 GMT
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Hello luzr

Very good

With this it is easy to expand RichText to include and manage any new object.

One question: Once the Qtf text is saved

Quote:[\$0,0#00000000000000000000000000000000:Default]
[{\}
[s0; Some line&]
[s0; Here comes the RichObject:
@ @mytype:1200*200`Hello world!`
&]
[s0; Next line]

, I would like to parse through it to get the normal text and the text inside the objects.

Is there a smart way through an implemented interface or I should have to do a parser for it?.

Best regards
Koldo

Subject: Re: RichEdit and styles questions
Posted by [mirek](#) on Thu, 04 Jun 2009 19:43:34 GMT
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koldo wrote on Thu, 04 June 2009 02:57Hello luzr

Very good

With this it is easy to expand RichText to include and manage any new object.

One question: Once the Qtf text is saved

```
Quote:[ $$0,0#00000000000000000000000000000000:Default]
[{}
[s0; Some line&]
[s0; Here comes the RichObject:
@ @mytype:1200*200`Hello world!`
&]
[s0; Next line]
```

, I would like to parse through it to get the normal text and the text inside the objects.

Is there a smart way through an implemented interface or I should have to do a parser for it?.

Best regards
Koldo

I guess you could consider RichText interfaces... Maybe Iterator?

Mirek

Subject: Re: RichEdit and styles questions
Posted by [koldo](#) on Thu, 04 Jun 2009 21:24:38 GMT
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Sorry Mirek

Quote:I guess you could consider RichText interfaces... Maybe Iterator?

I have never used them and I do not have any idea to do it.

Best regards
Koldo

Subject: Re: RichEdit and styles questions
Posted by [mirek](#) on Fri, 05 Jun 2009 08:02:39 GMT
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Well, it is probably the least documented part

Anyway, it is nothing too complicated. There is RichText type that contains the, well, uhm, RichText. You can access individual RichPara paragraphs and RichTable tables. The only complications is that RichTables have RichTxt (base class of RichText) as cells (hierarchic structure).

Anyway, most of hierarchy caused complexity is avoided if you use "RichTxt::Iterator" (or Updateliterator). In that case you will receive just a series of paragraphs, which are quite easy to get in (they are just array of text strings with font and RichObjects).

Mirek

Subject: Re: RichEdit and styles questions
Posted by [koldo](#) on Fri, 05 Jun 2009 11:31:54 GMT
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Sorry Mirek

I do not know where to begin.

I have checked Upp source and Forum and I did not find use or samples of Iterator.

Could you please give me any idea?

MyRichEdit editor;

... editing ...

RichText text = editor.Get();

-->To include here

Best regards
Koldo

Subject: Re: RichEdit and styles questions
Posted by [mirek](#) on Fri, 05 Jun 2009 11:33:58 GMT
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Search for

RichFindIterator

(in RichEdit sources)

Mirek

Subject: Re: RichEdit and styles questions
Posted by [koldo](#) on Fri, 05 Jun 2009 20:24:42 GMT
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Hello Mirek

Well, it seems RichFindIterator is a way to implement a parser but not a RichEdit/Qtf parser itself.

So I will do it by myself. Much less difficult than doing a Svg Painter

Best regards
Koldo

Subject: Re: RichEdit and styles questions
Posted by [mirek](#) on Sun, 07 Jun 2009 19:56:01 GMT
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koldo wrote on Fri, 05 June 2009 16:24Hello Mirek

Well, it seems RichFindIterator is a way to implement a parser but not a RichEdit/Qtf parser itself.

So I will do it by myself. Much less difficult than doing a Svg Painter

Best regards
Koldo

Use ParseQTF to convert QTF->RichText. Then use either direct code or iterators to go through it.

Mirek
