Wt - Support #2066

Usage of QPainter in WQApplication

07/26/2013 12:09 PM - Vitaly Volochay

Status:	Closed		**Start date:**	07/26/2013
Priority:	High		**Due date:**	
Assignee:	Wim Dumon		**% Done:**	0%
Category:			**Estimated time:**	0.00 hour
Target version:	3.3.0			

Description

Hello! I want to know is it possible to draw with QPainter on QImage (for example) in WQApplication. Other questiong is what restriction WPainter has compared to QPainter?

Thank you.

History

#1 - 07/29/2013 12:54 PM - Koen Deforche

- Status changed from New to Feedback

- Assignee set to Koen Deforche

Hey,

We've never done that, but I wouldn't see why that doesn't work (assuming that Qt allows the use of QPainter and QImage in a 'console' application?).

WPainter provides pretty much the same API as QPainter; it's main differences are in API to load images, and Wt also has not as much support of computing (mathematically) properties of painted painter paths (e.g. intersections etc...).

Regards,

koen

#2 - 07/29/2013 02:35 PM - Vitaly Volochay

Thanks for you answer!

I tried code below and it works widget with picture shows up (its in WQApplication::create()):

QString imageName = "qimage.png";

QPainter painter;

painter.setPen(QPen(Qt::color1));

painter.drawRect(QRect(0,0,50,50));

painter.end();

image.save(imageName);

Wt::WFileResource *imageFile = new Wt::WFileResource("image/png", imageName.toStdString());

Wt::WImage *wImage = new Wt::WImage(imageFile, "PNG version");

mainLayout->addWidget(wImage, 1);

but there is a problem: when I navigate in menu (WNavigationBar with WMenu), warning popup windows appears: "Wt internal error: SyntaxError: Unexpected token ILLEGAL, code: undefined, description: undefined". I think it somehow linked with changes in internal path. I also figured out that all this happens because of one string:

image.save(imageName);

If I remove this one - no problem solved, but i don't see another way to pass QImage -> WImage without saving it to file.

Can you tell me how to fix it please?

#3 - 07/29/2013 02:43 PM - Koen Deforche

Hey,

I cannot link this error to setting a filename to the image. Would be it easy for you to isolate this problem in a small test case for us to investigate?

Regards,

koen

#4 - 07/29/2013 02:58 PM - Vitaly Volochay

It's not because of setting file name of image but because of saving it to file on disk. I will write minimum application and attach it here.

#5 - 07/29/2013 05:07 PM - Vitaly Volochay

Seems like I localized a problem. There is no problem with internal path, there is a problem with WPaintedWidget. After I call QImage::save() and then create inheritor of WPaintedWidget there popup warning starting to appear.

Seems like I've got similar problem as this: http://redmine.webtoolkit.eu/boards/2/topics/6445

If you want I will attach min application.

#6 - 07/29/2013 05:30 PM - Wim Dumon

Maybe see the answer here: http://redmine.webtoolkit.eu/boards/2/topics/6462

So can you verify that Qt didn't sneakily modify your C locale? Wt requires that the selected C locale formats its numbers like the default C locale, which isn't the case on some locales.

Wim.

#7 - 07/29/2013 05:41 PM - Vitaly Volochay

- File main.cpp added

I don't even create QCoreApplication and setlocale(LC_NUMERIC,"C") doesn't help me.

I create an example, it shows that after I save QImage I can't create WPaintedWidget inheritors. Source file is in attachment.

#8 - 07/29/2013 09:48 PM - Koen Deforche

Hey,

It works for me, even when commenting out setLocale() and adding a QCoreApplication to main().

This is with Wt's latest git (although I suspect that doesn't matter) and Qt 4.8.1 on Ubuntu.

I'm curious what's affecting your (and the other reported) WPaintedWidget though. Except for locale I cannot imagine how Qt can interfere with it. Could you capture the requests in Chrome and send me the last one when you get the failure?

Regards,

koen

#9 - 07/30/2013 09:56 AM - Vitaly Volochay

Koen Deforche wrote:

> Hey,
>
> It works for me, even when commenting out setLocale() and adding a QCoreApplication to main().
>
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> I'm curious what's affecting your (and the other reported) WPaintedWidget though. Except for locale I cannot imagine how Qt can interfere with it. Could you capture the requests in Chrome and send me the last one when you get the failure?
>
> Regards,
>
> koen

> I tried it and mozilla and sometimes it works fine, but sometimes I relauch wt server and get this error:

> "Wt internal error: SyntaxError: identifier starts immediately after numeric literal, code: undefined, description: undefined".

In chrome it also sometimes works, sometimes - not, behaviour seems so random but in my other real application I always have errors.

When i have errors requests are the same as if no problems and lookes like:

"POST http://ip:port/?wtd=uywE550jtPR3zY8S [HTTP/1.1 200 OK 1мс]"

May be there are some other way to pass QImage to WImage without save it to file and then load (may be load it from byte array - char* or something)?

#10 - 07/30/2013 10:16 AM - Koen Deforche

Hey,

You should be able to see the response of the failed request in the developer tools.

What version of boost are you using?

Regards,

koen

#11 - 07/30/2013 10:39 AM - Vitaly Volochay

I am not familiar with web programming, sorry. Response looks like:

\"Wt.*p*.response(--1518218007);{var j4=Wt3_3_0.$('oqvy5h6');

var j5=document.createElement('div');j4.appendChild(j5);

j5.setAttribute('id', 'oqvy5gx');

j5.style.width='50.0px';

j5.style.height='50.0px';

j5.style.maxWidth='50.0px';

j5.style.maxHeight='50.0px';

j5.style.visibility='hidden';

Wt3_3_0.setHtml(j5,'

');

if(Wt3_3_0.getElement('coqvy5gx').getContext){{var
ctx=Wt3_3_0.getElement('coqvy5gx').getContext('2d');ctx.clearRect(0,0,50,50);ctx.save();ctx.save();ctx.lineWidth=1;ctx.lineCap='square';ctx.fillStyle='
rgb(0,255,0)';ctx.font='10.0pt sans-serif
';ctx.beginPath();ctx.moveTo(0,0000000e+00,0,0000000e+00);ctx.lineTo(5,0000000e+01,0,0000000e+00);ctx.lineTo(5,0000000e+01,5,0000000e+01
);ctx.lineTo(0,0000000e+00,5,0000000e+01);ctx.lineTo(0,0000000e+00,0,0000000e+00);ctx.moveTo(0,0000000e+00,0,0000000e+00);ctx.fill();

ctx.restore();ctx.restore();}}

Wt3_3_0.$('oqvy5gx').wtResize=function(self, w, h) {var u = $(self).find('canvas, img');if (w >= 0) u.width(w);if (h >= 0) u.height(h);};

Wt3_3_0.$('oqvy5gx').wtResize=function(self, w, h) {var u = $(self).find('canvas, img');if (w >= 0) u.width(w);if (h >= 0) u.height(h);};

Wt3_3_0.$('oqvy5gx').wtResize=function(self, w, h) {var u = $(self).find('canvas, img');if (w >= 0) u.width(w);if (h >= 0) u.height(h);};

Wt3_3_0.$('oqvy5gx').wtResize(Wt3_3_0.$('oqvy5gx'),50,50,false);;

Wt.layouts2.updateConfig('oqvy5h6',{ rows:0,0,0],[0,0,0],[0,0,0, cols:--1,0,12, items:
[{align:16,id:'oqvy5h1'},{align:16,id:'oqvy5gz'},{align:16,id:'oqvy5gx'}]});

}{var j6=Wt3_3_0.$('oqvy5h6');

var j7=document.createElement('div');j6.appendChild(j7);

j7.setAttribute('id', 'oqvy5gu');

j7.style.width='50.0px';

j7.style.height='50.0px';

j7.style.maxWidth='50.0px';

j7.style.maxHeight='50.0px';

j7.style.visibility='hidden';

Wt3_3_0.setHtml(j7,'

');

if(Wt3_3_0.getElement('coqvy5gu').getContext){{var
ctx=Wt3_3_0.getElement('coqvy5gu').getContext('2d');ctx.clearRect(0,0,50,50);ctx.save();ctx.save();ctx.lineWidth=1;ctx.lineCap='square';ctx.fillStyle='
rgb(0,255,0)';ctx.font='10.0pt sans-serif
';ctx.beginPath();ctx.moveTo(0,0000000e+00,0,0000000e+00);ctx.lineTo(5,0000000e+01,0,0000000e+00);ctx.lineTo(5,0000000e+01,5,0000000e+01
);ctx.lineTo(0,0000000e+00,5,0000000e+01);ctx.lineTo(0,0000000e+00,0,0000000e+00);ctx.moveTo(0,0000000e+00,0,0000000e+00);ctx.fill();

ctx.restore();ctx.restore();}}

Wt3_3_0.$('oqvy5gu').wtResize=function(self, w, h) {var u = $(self).find('canvas, img');if (w >= 0) u.width(w);if (h >= 0) u.height(h);};

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Wt3_3_0.$('oqvy5gu').wtResize=function(self, w, h) {var u = $(self).find('canvas, img');if (w >= 0) u.width(w);if (h >= 0) u.height(h);};

Wt3_3_0.$('oqvy5gu').wtResize(Wt3_3_0.$('oqvy5gu'),50,50,false);;

Wt.layouts2.updateConfig('oqvy5h6',{ rows:[0,0,0],[0,0,0],[0,0,0],[0,0,0], cols:[-1,0,12, items:
[{align:16,id:'oqvy5h1'},{align:16,id:'oqvy5gz'},{align:16,id:'oqvy5gx'},{align:16,id:'oqvy5gu'}]});

}\"

I am using boost: 1.41.0

#12 - 07/30/2013 10:43 AM - Koen Deforche

- Assignee changed from Koen Deforche to Wim Dumon

Hey,

That's definitely a locale problem. The numbers are being serialized using ',' as decimal point instead of '.'.

Wim, any idea how this can be solved?

Regards,

koen

#13 - 07/30/2013 11:02 AM - Wim Dumon

setlocale(LC_NUMERIC,"C"); in the right place should be the answer.

Maybe the call to QPainter::save() changes the locale (that's what I call an unexpected side effect)? So did you try to put this call right after image.save()?

BR,

Wim.

#14 - 07/30/2013 12:15 PM - Vitaly Volochay

Seems like you're right and QPainter::save change locale. When I call setlocale after image.save() everything is OK. Thanks for your help!

#15 - 07/30/2013 12:46 PM - Wim Dumon

- Status changed from Feedback to Closed

Files

| main.cpp | 3.25 KB | 07/29/2013 | Vitaly Volochay |