Subject: MessageCtrl: A passive notifications ctrl and manager. Posted by Oblivion on Sun, 18 Feb 2018 18:21:03 GMT

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Hello all,

KDE (and some other DEs or apps) have a nice, non-intrusive ("passive") notifications widgets. Here is the U++ counterpart.

This is the initial release. Although it is working pretty well, glitches should be expected.

Message package works on whatever U++ works. on. Package contains API docs and a reference example.

MessageCtrl package for U++

This class implements a messages manager.

Messages are simple message boxes similar to prompts in that they can allow the same basic user

actions. However, message boxes are not meant as a replacement for the traditional U++ dialogs. The main difference between the messages and the prompts is that the message boxes are implemented

as frames instead of dialogs, and are meant to be less intrusive, and non-blocking.

There are several types of messages:

- Information: Should be used to display common information.
- Warning: Should be used to report non-critical issue, to inform that everything is all right.
- Success: Should be used to display successful operations. Essentially this is an information notification.
- Question: Should be used to ask for some interaction.
- Error: Should be used to display critical application errors
- Custom: If the predefined notification types don't suit your needs, you can create one.

Message boxes use QTF texts. This allows for embedding hyperlinks in messages. It also means that in some cases the text messages should be escaped, using DeQtf() function.

History:

2018-04-07: UseCross() method added. It is now possible to use a small image button with cross instead of OK button. Informative message boxes use crosses by default.

2018-03-03: Name clash on Windows fixed.

MessageBox::Type::ERROR -> MessageBox::Type::FAILURE Message display order changed. New messages will be inserted as the the topmost/bottom-most frame (depending on orientation) Selective clearing added.

2018-03-01: Information and custom message boxes can now have timeouts.

2018-02-21: Widget renames as MessageCtrl. (Final)

- 2018-02-20: It is now possible to add mesasges as both top and bottom frames. It is now possible to add single message box without using the manager. Message framework further refactored.
- 2018-02-19: Name change: Notification -> Message. Code refactored. (Thanks Klugier!)
- 2018-02-18: Initial public release

You can find the package below on the bottom of this message, or You can grab its source code from: https://github.com/ismail-yilmaz/upp-components/tree/master/ CtrlLib/MessageCtrl

Screenshot:

Please feel free to comment on it.

Best regards, Oblivion

File Attachments
1) MessageCtrl_Package.zip, downloaded 494 times

Subject: Re: Notification: A passive notifications ctrl and manager. Posted by Klugier on Sun, 18 Feb 2018 19:58:20 GMT View Forum Message <> Reply to Message

Hello,

Look nice! However, I found some minor glitch when selecting notification content. Here is screen-shot:

Sincerely, Klugier

File Attachments

1) Screenshot_20180218_204553.png, downloaded 1427 times

Subject: Re: Notification: A passive notifications ctrl and manager. Posted by Klugier on Sun, 18 Feb 2018 20:28:17 GMT View Forum Message <> Reply to Message

Hello,

I made small code review on GitHub. I would be grateful if you will address my comments. Here is the review.

Sincerely, Klugier

Subject: Re: Message: A passive notifications ctrl and manager. Posted by Oblivion on Mon, 19 Feb 2018 00:10:44 GMT View Forum Message <> Reply to Message

Hello Klugier,

I made the modifications you've suggested. Also I've changed the package name to "Message" Thanks for the review!

I'll investigate the glitch. (Seems like it happens only with single-line messages, when RichTextCtrl::VCenter() is on.

Best regards, Oblivion

Subject: Re: Message: A passive notifications ctrl and manager. Posted by Oblivion on Mon, 19 Feb 2018 14:01:17 GMT View Forum Message <> Reply to Message

Hello Klugier,

Unfortunately, the highlight glitch doesn't seem to stem from my code.

```
It can be replicated as in the below code:
include <CtrlLib/CtrlLib.h>
using namespace Upp;
class RichTextTest : public TopWindow {
FrameTop<RichTextCtrl> qtf;
Button bt:
public:
RichTextTest()
{
 SetRect(0, 0, 640, 480);
 Sizeable().Zoomable().CenterScreen();
 Add(bt.RightPos(4).BottomPos(4));
 bt << [=] {
 String z = "Hello World!";
 qtf.VCenter();
                               // Comment out this line, and highlighting works.
 qtf.SetQTF("[G1 " \langle z \rangle;
 qtf.Height(40);
                               // As the height increases, highlighting becomes impossible.
                          // This problem doesn't arise with wrapped (Line > 1) text
 qtf.SetFrame(FieldFrame());
 AddFrame(qtf);
 };
}
};
GUI_APP_MAIN
{
RichTextTest().Run();
}
```

Maybe the glitch is in the RichTextEdit's text centering method?

Best regards, Oblivion

Subject: Re: Message: A passive notifications ctrl and manager. Posted by Klugier on Mon, 19 Feb 2018 21:12:10 GMT

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Hello,

It seems that your url to package returns 404 error (Not found) after the package name chaining. Can you fix it?

Sincerely, Klugier

Subject: Re: Message: A passive notifications ctrl and manager. Posted by Oblivion on Mon, 19 Feb 2018 21:35:31 GMT View Forum Message <> Reply to Message

Link fixed.

Best regards, Oblivion

Subject: Re: Message: A passive notifications ctrl and manager. Posted by Oblivion on Tue, 20 Feb 2018 16:46:19 GMT View Forum Message <> Reply to Message

Hello Klugier, and all.

I've further refactored and cleaned up the code. Also, I updated the example.

2918-02-20: It is now possible to add messages as both top and bottom frames. It is now possible to add single message box without using the manager. Message framework further refactored.

Screenshot:

Please feel free to comment on it.

Best regards, Oblivion Subject: Re: Message: A passive notifications ctrl and manager. Posted by Klugier on Tue, 20 Feb 2018 23:02:46 GMT View Forum Message <> Reply to Message

Hello,

I was thinking about your code and I think it's final name should be MessageCtrl. Ctrl prefix in upp world means any graphical control, that you can use in your own code. In the Message class we are solving such problem. Please, let me know what do you think?

Message is too general. It could also represent chat message or IPC message etc.

Some time ago, I also created "Associated projects" website to collect interesting projects related to the Upp. If you have any comments related to that page, please let me know.

Sincerely, Klugier

Subject: Re: Message: A passive notifications ctrl and manager. Posted by Oblivion on Tue, 20 Feb 2018 23:25:01 GMT View Forum Message <> Reply to Message

Hello Klugier,

Quote:Hello,

I was thinking about your code and I think it's final name should be MessageCtrl. Ctrl prefix in upp world means any graphical control, that you can use in your own code. In the Message class we are solving such problem. Please, let me know what do you think?

Message is too general. It could also represent chat message or IPC message etc.

Some time ago, I also created "Associated projects" website to collect interesting projects related to the Upp. If you have any comments related to that page, please let me know.

Well, I have no objections to rename it to MessageCtrl & MessageBox as its helper. It makes sense.I'll commit the changes tomorrow. Regarding the page: I bave noticed it recently, and I have to thank you for listing my repository there. :)

Aside from that, the only thing that is annoying on that page is, it is rather empty. And it is a shame, because U++ is an excellent tool.

Best regards, Oblivion

Subject: Re: Message: A passive notifications ctrl and manager. Posted by Oblivion on Wed, 21 Feb 2018 19:18:28 GMT View Forum Message <> Reply to Message

Hello Klugier, Widget is renamed to MessageCtrl. (Final name)

Best regards, Oblivion

Subject: Re: MessageCtrl: A passive notifications ctrl and manager. Posted by Oblivion on Fri, 02 Mar 2018 00:45:14 GMT View Forum Message <> Reply to Message

Hello,

MessageCtrl gained timeout support.

It is now possible to display time-constrained message boxes. (Restricted to information and custom type message boxes)

Reference example is updated accordingly.

See first message of this topic for GIT address and/or zipped package.

Best regards, Oblivion

Subject: Re: MessageCtrl: A passive notifications ctrl and manager. Posted by forlano on Sun, 04 Mar 2018 07:33:30 GMT View Forum Message <> Reply to Message

Oblivion wrote on Fri, 02 March 2018 01:45

See first message of this topic for GIT address and/or zipped package.

Oblivion

Hi Oblivion,

I got the package from your first message. I put both packages in MyApps and compiled with Minggw.

Because I got many compiler error I wonder if you tested the package with Minggw or I am missing some configuration.

Thanks,

Luigi

File Attachments
1) pic1.png, downloaded 1431 times

Subject: Re: MessageCtrl: A passive notifications ctrl and manager. Posted by Oblivion on Sun, 04 Mar 2018 09:40:03 GMT View Forum Message <> Reply to Message

Hello Luigi,

Thanks for the report!

It seems that a name clash have happened after I refactored the code. It should be fixed now. I updated the package. (In the first message)

Could you please check it?

Best regards, Oblivion.

Subject: Re: MessageCtrl: A passive notifications ctrl and manager. Posted by forlano on Sun, 04 Mar 2018 11:35:08 GMT View Forum Message <> Reply to Message

Oblivion wrote on Sun, 04 March 2018 10:40 Could you please check it? Oblivion.

Hi Oblivion,

now it works. I just needed a similar widget, thanks! I have few questions:

1) I saw that the new message, even if Top() is set are appended to the existing ones. Is it possible that the most recent message enter from top and appear on first row? In this way the user can observe only the first row.

2) Moreover, is it possible to add a message without any button?

3) It would be nice to set a maximum number of messages, the most recent, and delete automatically the others that become obsolete.

Best regards, Luigi

Subject: Re: MessageCtrl: A passive notifications ctrl and manager. Posted by Oblivion on Sun, 04 Mar 2018 12:10:56 GMT View Forum Message <> Reply to Message

Hello Luigi,

Quote:

now it works. I just needed a similar widget, thanks! I have few questions:

1) I saw that the new message, even if Top() is set are appended to the existing ones. Is it possible that the most recent message enter from top and appear on first row? In this way the user can observe only the first row.

2) Moreover, is it possible to add a message without any button?

3) It would be nice to set a maximum number of messages, the most recent, and delete automatically the others that become obsolete.

1) Done (see package) It is the default behaviour now. :) I may also add Append() if requested.

2) Yes this is possible too. But I have some reservations about this.

It might make sense to add this option to MessageBox, but IMO this should be restricted to Information type message box. (as with the timeout).

Others (Error, Success, Warning, Question) need to stay, and wait for confirmation, since they are although informational, yet important messages.

So here's what I propose: I'll add it as an option to both Custom message boxes, and Information boxes (with a default timeout)

3) I don't quite understand this one. You ask me to add a message limit, time limit, or something else? Could you elaborate a little more?

Subject: Re: MessageCtrl: A passive notifications ctrl and manager. Posted by forlano on Sun, 04 Mar 2018 15:56:27 GMT View Forum Message <> Reply to Message

Oblivion wrote on Sun, 04 March 2018 13:10Hello Luigi,

Done (see package) It is the default behaviour now. :)
 I may also add Append() if requested.

2) Yes this is possible too. But I have some reservations about this.

It might make sense to add this option to MessageBox, but IMO this should be restricted to Information type message box. (as with the timeout).

Others (Error, Success, Warning, Question) need to stay, and wait for confirmation, since they are although informational, yet important messages.

So here's what I propose: I'll add it as an option to both Custom message boxes, and Information boxes (with a default timeout)

3) I don't quite understand this one. You ask me to add a message limit, time limit, or something else? Could you elaborate a little more?

Best regards, Oblivion

Hello Oblivion,

Thanks a lot for the upgrade! Now it looks better for my needs. However an Append() method could be useful in some cases and make the Ctrl more flexible.

For request #2, I do not intend substitute your Ctrl, just add an option to hide the button to not suggest to press it.

In my program the user performs some selection on two separate lists. Some of his choice are legal, other illegal and other legal although problematic. Depending on his choice your Ctrl may signal him what he is doing. The message should only inform him in a not blocking way (I would not force him to push a button). Actually I do this in a ugly way with a label that set different colored images.

For #3 the limit should refer to the visible messages, for example only the latest 3. In the previous case, while the user do his task the messages appear from top but only the latest are important, so make no sense to show all of them.

Subject: Re: MessageCtrl: A passive notifications ctrl and manager. Posted by Oblivion on Sun, 04 Mar 2018 20:05:04 GMT View Forum Message <> Reply to Message

Hello Luigi,

Package and example updated.

MessageCtrl: Append() method added. MessageCtrl: Selective clearing added. (You can target a specific ctrl for clearing).

Regarding the buttonless informative message boxes: I will add them as an option.

How to proceed?

Should I add an overlay icon that only appears when the mouse pointer is near, or should I just let them have a timeout?

Limiting the number of displayed message boxes is also possible and trivial, yet it'll need some internal changes. I'll look into it in the following days.

By the way, you can use each and every type of MessageBox without using MessageCtrl. MessageCtrl is a simple manager for MessageBoxes.

Best regards, Oblivion.

Subject: Re: MessageCtrl: A passive notifications ctrl and manager. Posted by forlano on Sun, 04 Mar 2018 22:38:30 GMT View Forum Message <> Reply to Message

Oblivion wrote on Sun, 04 March 2018 21:05 Regarding the buttonless informative message boxes: I will add them as an option.

How to proceed? Should I add an overlay icon that only appears when the mouse pointer is near, or should I just let them have a timeout?

I am not sure to have understood your question. For the buttonless informative message I was

thinking at a message that can stay forever in the list. If something else happens a new message appear on top, while the previous and now obsolete message shift down. However the possibility to set a timeout for the message can be very useful. For example TIMEOUT = 0 means stay forever and any value greater than 0 means stay that amount of time.

Thank you very much! Luigi

Subject: Re: MessageCtrl: A passive notifications ctrl and manager. Posted by forlano on Sun, 11 Mar 2018 11:03:28 GMT View Forum Message <> Reply to Message

Hi Oblivion,

today I tried to test MessageCtrl with a layout file. After dropping the ctrl on the .lay file as user class the compiler complained:

C:\upp/uppsrc/CtrlCore/TopWindow.h (204): required from 'void Upp::CtrlLayout(T&) [with T = MessageLay]'

C:\MyApps\MessageLay\MessageLay.h (10): In file included from

C:\MyApps\MessageLay\MessageLay.h:10:0,

C:\MyApps\MessageLay\main.cpp (1): from C:\MyApps\MessageLay\main.cpp:1:

C:\upp/uppsrc/CtrlCore/TopWindow.h (212): required from 'void Upp::CtrlLayout(T&, const char*) [with T = MessageLay]'

C:\MyApps\MessageLay\main.cpp (5): required from here

C:\MyApps/MessageLay/MessageLay.lay (2): error: 'class Upp::MessageCtrl' has no member named 'HSizePosZ'

C:\upp/uppsrc/CtrlCore/lay.h (57): error: 'class Upp::MessageCtrl' has no member named 'LayoutId'

C:\upp/uppsrc/CtrlCore/lay.h (57): error: no matching function for call to

'Upp::Ctrl::Add(Upp::MessageCtrl&)'

Does the ctrl needs some more nethods to better integrate with current layout file or am I missing something?

Thanks, Luigi

Subject: Re: MessageCtrl: A passive notifications ctrl and manager. Posted by Oblivion on Sun, 11 Mar 2018 11:32:58 GMT View Forum Message <> Reply to Message

Hello Luigi,

The thing is, MessageCtrl is simply a manager, there is no real reason to add it to a "layout". IT is not a Ctrl derived class.

Messages will resize automatically depending on the size of it's parent.

You instantiate it in your, say, TopWindow, and then set a target (a Ctrl) for it to attach:

```
class MyWindow : public TopWindow {
   MessageCtrl messages;
   DocEdit editor;
   RichEdit richeditor;
   void DisplayEditorErrorMessage() {
      messages.Error(editor, "This is an error message.");
   }
   void DisplayRichEditorSuccessMessage() {
      messages.Success(richeditor, "This is a success message.");
   }
   // Other members, constructors, etc...
};
```

Think of it like a Prompt. You do not use them with layout. Nor MessageCtrl. (Of course you can also attach messages to layouted ctrls)

Example code provided with the MessageCtrl demonstrates that. (It adds top message boxes to the window itself, and the bottom meassage box to the editor widget.)

I've written a new example to clarify the behaviour. Please find the attached example. :) Best regards, Oblivion

File Attachments 1) MessageTest.zip, downloaded 434 times

Subject: Re: MessageCtrl: A passive notifications ctrl and manager. Posted by forlano on Mon, 12 Mar 2018 07:24:58 GMT View Forum Message <> Reply to Message Oblivion wrote on Sun, 11 March 2018 12:32 I've written a new example to clarify the behaviour. Please find the attached example. :)

Hello Oblivion,

now everything is clear. Thanks! Luigi

Subject: Re: MessageCtrl: A passive notifications ctrl and manager. Posted by forlano on Mon, 12 Mar 2018 08:58:36 GMT View Forum Message <> Reply to Message

Oblivion wrote on Sun, 11 March 2018 12:32 I've written a new example to clarify the behaviour. Please find the attached example. :)

One more question, please. How can I clear the message present, let's say, in editor ctrl? I tried

```
messages.Clear(editor.GetCaptureCtrl());
messages.Clear(editor);
```

with no success. Perhaps I must use several MessageCtrl and bind each of them to a different ctrl. Thanks, Luigi

Subject: Re: MessageCtrl: A passive notifications ctrl and manager. Posted by Oblivion on Mon, 12 Mar 2018 10:34:23 GMT View Forum Message <> Reply to Message

Hello Luigi,

with no success. Perhaps I must use several MessageCtrl and bind each of them to a different ctrl.

This is possible (and in some rare cases, might be useful) but not necessary. A single instance of MessageCtrl is usually sufficient.

All you need to do is pass a pointer to your ctrl:

messages.Clear(&editor)

(One shortcoming of the MessageCtrl is that currenty you cannot target a single message box automatically. Will be available soon though.)

Best regards, Oblivion

Subject: Re: MessageCtrl: A passive notifications ctrl and manager. Posted by Oblivion on Fri, 06 Apr 2018 21:10:30 GMT View Forum Message <> Reply to Message

Hello,

MessageCtrl updated.

From now on informative message boxes (information, warning, success, error) use crosses instead of OK button.

You can find the updated package in the first message of this topic, or grab it from: https://github.com/ismail-yilmaz/upp-components/tree/master/ CtrlLib/MessageCtrl

Screenshot:

Best regards, Oblivion

File Attachments
1) MessageCtrl.png, downloaded 833 times

Subject: Re: MessageCtrl: A passive notifications ctrl and manager. Posted by Mahanthesh on Fri, 05 Apr 2019 10:57:18 GMT View Forum Message <> Reply to Message

Hi,

I want to change the message font size of MessageCtrl.

Please let me know how to do..

Subject: Re: MessageCtrl: A passive notifications ctrl and manager. Posted by Mahanthesh on Fri, 05 Apr 2019 11:00:21 GMT View Forum Message <> Reply to Message

Hi,

I want to change the message font size of MessageCtrl. Please let me know how to do..

Subject: Re: MessageCtrl: A passive notifications ctrl and manager. Posted by Oblivion on Fri, 05 Apr 2019 12:50:58 GMT View Forum Message <> Reply to Message

Hello Mahanthesh, and welcome to the U++ forums!

MessageCtrl is using Qtf. And it can be formatted using Qtf syntax. You can even put images or tables in it (if you really need such options...)

See here for more details on the format: https://www.ultimatepp.org/srcdoc\$RichText\$QTF_en-us.html

As for your question. Here is a modified version of the reference code:

#include <CtrlLib/CtrlLib.h>
#include <MessageCtrl/MessageCtrl.h>

using namespace Upp;

class Messages : public TopWindow { MessageCtrl msg; DocEdit editor; Button button1, button2;

public: Messages() { Title("U++ Message Boxes (Passive Notifications)"); SetRect(0,0, 640, 480); Sizeable().Zoomable().CenterScreen(); SetMinSize({100, 100});

```
auto action = [=](int id) {
  switch(id) {
```

```
case IDYES: PromptOK("You've chosen 'yes'"); break;
 case IDNO: PromptOK("You've chosen 'no'"); break;
 }
 };
 Add(editor.HSizePosZ().VSizePos(0, 24));
 Add(button1.SetLabel("Test").RightPos(4).BottomPos(4));
 Add(button2.SetLabel("Clear").LeftPos(4).BottomPos(4));
 button2 << [=] { msg.Clear(this); }; // Selective clearing.
 button1 << [=] {
 msg.Animation()
   .Top()
   .Information(*this, "This is a time-constrained information message. It will disappear in 5
seconds.", Null, 5)
   .Success(*this, "This is a success message.")
   .Warning(*this, "This is a warning message.")
   .Error(*this, "This is an error message.")
   .Information(*this, "[C [4 This information message is using 16 pt courier font...]") // <-- Different
font face and font size...
   .Bottom()
   .AskYesNo(editor, "This is a guestion box 'in' the text editor with "
              "[^https:www`.ultimatepp`.org^ l`i`n`k]"
              " support. Would you like to continue?",
              action.
              callback(LaunchWebBrowser)
 );
};
}
};
GUI_APP_MAIN
{
Messages().Run();
}
```

Result should be (this is on Linux):

If you have more questions about the MesasgeCtrl, I'll try to answer them.

Best regards, Oblivion

File Attachments

Subject: Re: MessageCtrl: A passive notifications ctrl and manager. Posted by forlano on Sun, 25 Aug 2019 21:03:36 GMT View Forum Message <> Reply to Message

Hello Oblivion,

for first time I used MessageCtrl under linux. There is a compilation problem... maybe again a name clash

Best regards, Luigi

File Attachments
1) 2019-08-25-225908_1440x900_scrot.png, downloaded 731 times

Subject: Re: MessageCtrl: A passive notifications ctrl and manager. Posted by Oblivion on Sun, 25 Aug 2019 23:30:09 GMT View Forum Message <> Reply to Message

Hello Luigi,

Thank you for reporting the compilation error.

Apparently the "Success" tag is defined as a preprocessor constant in X.h, and this include file is required for the Upp's X11 mode.

And unfortunately the method has to be renamed to something else. (undefining and redefining the "Success" constant won't work in this case). Therefore, I renamed it to OK.

It should work now. Just substitute the MessageCtrl::Success calls with MessageCtrl::OK calls in your code.

https://github.com/ismail-yilmaz/upp-components/tree/master/ CtrlLib/MessageCtrl

Let me know if you run into any other troubles.

And I am sorry for the trouble it caused.

Best regards, Oblivion Oblivion wrote on Mon, 26 August 2019 01:30Hello Luigi,

And unfortunately the method has to be renamed to something else. (undefining and redefining the "Success" constant won't work in this case). Therefore, I renamed it to OK.

Hi Oblivion,

thanks a lot for the correction! Now it works as usual. Best regards, Luigi

Subject: Re: MessageCtrl: A passive notifications ctrl and manager. Posted by Oblivion on Tue, 02 Feb 2021 21:07:48 GMT View Forum Message <> Reply to Message

Hi,

MessageCtrl got a small update:

- Standard message boxesnow adjust to light/dark theme.

Also, MessageCtrl is also available via UppHub. This means it can be downloaded and updated via TheIDE's package manager if you are using the latest nightly build of TheIDE.

Best regards, Oblivion

Subject: Re: MessageCtrl: A passive notifications ctrl and manager. Posted by Oblivion on Sat, 21 Jan 2023 08:19:15 GMT View Forum Message <> Reply to Message

Hi,

Since Upp's migration to GTK3, the slide animation was not working on most linux/POSIX system

-usually with Gnome installed)

It was a problem with Upp's animation routine and is now fixed in the nightly builds of U++. Message boxes should now have slide animation as expected.

Best regards, Oblivion

