Subject: TheIde editor getting sluggish
Posted by Alboni on Mon, 09 Nov 2015 12:50:27 GMT
View Forum Message <> Reply to Message

Hello, I would like to express that the editor of TheIde is remarkedly slower the last few months to a point that it gets mildly annoying when typing. I'm using it on 64 bit linux mint (KDE edition) on a core-i3 laptop with 8GB ram. The stable version doesn't seem to have the issue.

Subject: Re: TheIde editor getting sluggish
Posted by dolik.rce on Mon, 09 Nov 2015 14:10:45 GMT
View Forum Message <> Reply to Message

I agree with that. I noticed the very same thing after upgrading theide few days ago (after not using it at all for about a year). I have an older laptop and there is visible pause between keystroke and the letter appearing on the screen, which is pretty confusing.

Is there some way to make theide faster? I guess it comes from the new c++ parser. Would it be possible to limit it's functionality? E.g. skip parsing standard libraries, I can easily live without that... Or scan the file only on ctrl+space, not after each key stroke. These could be optional choices, meant for people with low-end hardware like me

Best regards,
Honza

Subject: Re: TheIde editor getting sluggish
Posted by mirek on Mon, 09 Nov 2015 15:26:32 GMT
View Forum Message <> Reply to Message

Well, this is definitely something to investigate. Sorry for not noticing myself (perhaps my machine is too fast now...).

Just to bring things into perspective, what is your HW?

Anyway, the only thing assist++ related that could affect the speed is rescaning the file to display those "T++ points" in the left and overview of current files in Navigator. Anyway, it only happens when you stop typing for about 1 second. Can this be related?

It is also possible the problem is posix related, as I am now mostly working in win32...

Going to fire up that banana pi sitting on my desk to investigate...

Mirek

Subject: Re: TheIde editor getting sluggish
Posted by Oblivion on Mon, 09 Nov 2015 15:42:55 GMT
View Forum Message <> Reply to Message

Hello mirek,

I experinced a very similar sluhishness while typing, too.
(on an old machine (Axthlon XP 3200 (32 bit)/radeon X1600pro) and a very decent one (AMD FX 6100 six core processor (64 bit)/Radeon R7 240, both on Arch Linux (kernel 4.3))

FYI, in my case, the problem was apparently related to the GTK backend/painting.

Regards.

Oblivion

Subject: Re: TheIde editor getting sluggish
Posted by mirek on Mon, 09 Nov 2015 15:45:43 GMT
View Forum Message <> Reply to Message

So, with X11 backend it seems OK?

Mirek

Subject: Re: TheIde editor getting sluggish
Posted by mirek on Mon, 09 Nov 2015 15:56:17 GMT
View Forum Message <> Reply to Message

Tried with 2.4Ghz Celeron dual-core, with xfce, not delays when typing at all...

(Have to wait for that 1Ghz ARM to finish the compilation...

Subject: Re: TheIde editor getting sluggish
Posted by Oblivion on Mon, 09 Nov 2015 17:30:27 GMT
View Forum Message <> Reply to Message

mirek wrote on Mon, 09 November 2015 17:45So, with X11 backend it seems OK?

Mirek

That's correct.
When I switched to X11 (which, by the way is the backend I am using since then, and frankly have no idea if it is still the case with GTK) everthing worked smoothly.

Regards,

Oblivion.

Subject: Re: TheIde editor getting sluggish
Posted by dolik.rce on Mon, 09 Nov 2015 20:00:34 GMT
View Forum Message <> Reply to Message

Hi,

My hardware is older thinkpad (X200s) with Intel U2300 processor with @1.2GHz and 4Gb RAM.

Just tried with NOGTK version of theide and it feels significantly better. Still I can sometimes type faster than the screen updates, but it happens a lot less then with GTK version. So it really seems to be related to the backend.

Honza

Subject: Re: TheIde editor getting sluggish
Posted by Klugier on Mon, 09 Nov 2015 20:18:11 GMT
View Forum Message <> Reply to Message

Hello,

For me it works fine on KDE. My current configuration is Core i5 - 4 cores 2,9 Ghz with Nvidia Geforce. I see that you guys are using Radeon graphics card. I don't see the difference between TheIDE and Kate - KDE standard text editor. On my laptop with core i5 - 2 cores / 4 threads it works fine as well.

Quote:
When I switched to X11 (which, by the way is the backend I am using since then, and frankly have no idea if it is still the case with GTK) everthing worked smoothly.

GTK backend is default, because it is easier to develope/maintain CtrlCore that X11.

Sincerely,
Klugier

Subject: Re: TheIde editor getting sluggish
Posted by mirek on Tue, 10 Nov 2015 08:26:02 GMT
View Forum Message <> Reply to Message

dolik.rce wrote on Mon, 09 November 2015 21:00Hi,

My hardware is older thinkpad (X200s) with Intel U2300 processor with @1.2GHz and 4Gb RAM.

Just tried with NOGTK version of theide and it feels significantly better. Still I can sometimes type faster than the screen updates, but it happens a lot less then with GTK version. So it really seems to be related to the backend.

Honza

Perhaps it would be possible to test CodeEditor alone, just to isolate the possible cause? (With both backends).

Also, what is your GTK2.0 version?

Subject: Re: TheIde editor getting sluggish
Posted by dolik.rce on Tue, 10 Nov 2015 20:24:42 GMT
View Forum Message <> Reply to Message

mirek wrote on Tue, 10 November 2015 09:26dolik.rce wrote on Mon, 09 November 2015 21:00Hi,

My hardware is older thinkpad (X200s) with Intel U2300 processor with @1.2GHz and 4Gb RAM.

Just tried with NOGTK version of theide and it feels significantly better. Still I can sometimes type faster than the screen updates, but it happens a lot less then with GTK version. So it really seems to be related to the backend.

Honza

Perhaps it would be possible to test CodeEditor alone, just to isolate the possible cause? (With both backends).

Also, what is your GTK2.0 version?

I have the latest GTK2 available, version 2.24.28. There is also GTK 3.18.2 installed on my computer, but that should not be interfering in any way.

Testing with simple single window app consisting of only CodeEditor, with the same C++ file as in

TheIDE didn't show anything wrong. It works pretty fast. However, I was not able to make it use C++ syntax highlighting. Any hint on which CodeEditor method should I call and how?

Honza

Subject: Re: TheIde editor getting sluggish
Posted by mirek on Tue, 10 Nov 2015 22:17:20 GMT
View Forum Message <> Reply to Message

dolik.rce wrote on Tue, 10 November 2015 21:24mirek wrote on Tue, 10 November 2015 09:26dolik.rce wrote on Mon, 09 November 2015 21:00Hi,

My hardware is older thinkpad (X200s) with Intel U2300 processor with @1.2GHz and 4Gb RAM.

Just tried with NOGTK version of theide and it feels significantly better. Still I can sometimes type faster than the screen updates, but it happens a lot less then with GTK version. So it really seems to be related to the backend.

Honza

Perhaps it would be possible to test CodeEditor alone, just to isolate the possible cause? (With both backends).

Also, what is your GTK2.0 version?

I have the latest GTK2 available, version 2.24.28. There is also GTK 3.18.2 installed on my computer, but that should not be interfering in any way.

Testing with simple single window app consisting of only CodeEditor, with the same C++ file as in TheIDE didn't show anything wrong. It works pretty fast. However, I was not able to make it use C++ syntax highlighting. Any hint on which CodeEditor method should I call and how?

Honza

```
#include <CtrlLib/CtrlLib.h>
#include <CodeEditor/CodeEditor.h>

using namespace Upp;

GUI_APP_MAIN {
 TopWindow win;
 CodeEditor ce;
 ce.Highlight("cpp");
 ce <<= "Hello world!";
```

```
 win.Add(ce.SizePos());
 win.Sizeable().Zoomable().Run();
}
```

Subject: Re: TheIde editor getting sluggish
Posted by mirek on Tue, 10 Nov 2015 22:35:08 GMT
View Forum Message <> Reply to Message

If you are there, it is worth testing with big file with "full" lines... (not empty spaces after line endings).

Subject: Re: TheIde editor getting sluggish
Posted by Novo on Wed, 11 Nov 2015 02:47:08 GMT
View Forum Message <> Reply to Message

mirek wrote on Mon, 09 November 2015 10:26Well, this is definitely something to investigate. Sorry for not noticing myself (perhaps my machine is too fast now...).
...
It is also possible the problem is posix related, as I am now mostly working in win32...

I getting the same problem on a ~20-core Windows machine. I thought that this is a some kind of MT-problem (code doesn't scale well on many CPUs).

At some point I even wanted to profile TheIDE but ended up just using another editor instead ...

Subject: Re: TheIde editor getting sluggish
Posted by mirek on Wed, 11 Nov 2015 06:52:39 GMT
View Forum Message <> Reply to Message

Novo wrote on Wed, 11 November 2015 03:47mirek wrote on Mon, 09 November 2015 10:26Well, this is definitely something to investigate. Sorry for not noticing myself (perhaps my machine is too fast now...).
...
It is also possible the problem is posix related, as I am now mostly working in win32...

I getting the same problem on a ~20-core Windows machine. I thought that this is a some kind of MT-problem (code doesn't scale well on many CPUs).

At some point I even wanted to profile TheIDE but ended up just using another editor instead ...

TheIDE is basically single-threaded. There not much work to be done with other threads...

Mirek

Subject: Re: TheIde editor getting sluggish
Posted by mirek on Wed, 11 Nov 2015 07:11:43 GMT
View Forum Message <> Reply to Message

dolik.rce wrote on Mon, 09 November 2015 15:10
Is there some way to make theide faster? I guess it comes from the new c++ parser. Would it be possible to limit it's functionality? E.g. skip parsing standard libraries, I can easily live without that... Or scan the file only on ctrl+space, not after each key stroke. These could be optional choices, meant for people with low-end hardware like me

Now, with more testing on Banana PI, thoughts...

TheIDE does "assist" things automatically on two occasions:

a) when you stop writting for one second - it then rescans the file to update Navigator map of file and T++ bullets

b) when you type ".", "->" or "::"

Is it possible that the 'slugish' feel is associated with these events?

I am asking because while writing on PI, I had delays caused with these, but when writing really quick, it is less apparent they happen.

I can certainly add options to suppress these events. Or perhaps even to switch Assist++ off for good...

Mirek

Subject: Re: TheIde editor getting sluggish
Posted by mirek on Wed, 11 Nov 2015 16:52:18 GMT
View Forum Message <> Reply to Message

There are now options to enable/disable parts of assist that could slow things down....

However, I will investigate some more, I am afraid that there are more reasons to this...

Subject: Re: TheIde editor getting sluggish

Posted by mirek on Wed, 11 Nov 2015 23:54:09 GMT
View Forum Message <> Reply to Message

Identified possible issue in GTK backend - IsPainting was returning false positives, so instead of repainting single line, whole page got repainted.

Please try!

Subject: Re: TheIde editor getting sluggish
Posted by dolik.rce on Mon, 16 Nov 2015 05:23:47 GMT
View Forum Message <> Reply to Message

mirek wrote on Thu, 12 November 2015 00:54Identified possible issue in GTK backend - IsPainting was returning false positives, so instead of repainting single line, whole page got repainted.

Please try!

Hi Mirek,
Sorry it took me so long to reply, I've been to busy to test.

With this GTK bug fixed, it works great, even with all the Assist related options turned on.

One last annoying thing are the rescanning pop-ups when changing files and sometimes before building. They dissappear real quick, but it is kind of annoying to see a dialog flash on the that screen so fast that it can't even be read. What about displaying it only if the process takes longer then few seconds? I think it would improve the user experience.

Anyway, thanks for making theide fast again
Honza

Subject: Re: TheIde editor getting sluggish
Posted by Mindtraveller on Mon, 16 Nov 2015 10:01:17 GMT
View Forum Message <> Reply to Message

I suppose this dialog may be completely replaced by changing the state of Navigator control. It may be drawn semi-transparent or darkened or just disabled while rescanning is in progress. The only thing here is that change must not be too contrast as visual blinking may not be good for user.
And of course it must visualized be only when rescanning takes more than 3-4 seconds. In other case, rescanning must be done in background and without notification.

Subject: Re: TheIde editor getting sluggish
Posted by Oblivion on Mon, 16 Nov 2015 12:44:23 GMT

Hello Mirek,

I can confirm that after the GTk/paint fix, TheIDE is finally fast and responsive again.

Thanks!

Regards,
Oblivion

Subject: Re: TheIde editor getting sluggish
Posted by mirek on Mon, 16 Nov 2015 15:40:13 GMT

Mindtraveller wrote on Mon, 16 November 2015 11:01I suppose this dialog may be completely replaced by changing the state of Navigator control. It may be drawn semi-transparent or darkened or just disabled while rescanning is in progress. The only thing here is that change must not be too contrast as visual blinking may not be good for user.
And of course it must visualized be only when rescanning takes more than 3-4 seconds. In other case, rescanning must be done in background and without notification.

Yes, I was thinking about similar solution (but not in Navigator, which after all does not need to be even visible when it happens). I will probably add a feature to Progress to 'redirect' displaying somewhere else int he process.

As for delay, it is already there. Unfortunately, it looks like sometimes the total time is just a bit longer that the delay, so it does not really help.....

Anyway, for this release, I consider this issue closed. Will improve this in 2015...