Subject: Chromium embedded in U++
Posted by tojocky on Tue, 29 Mar 2011 16:46:09 GMT
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Hello All,

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Let look to Google process architecture:

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Any advice are welcome!

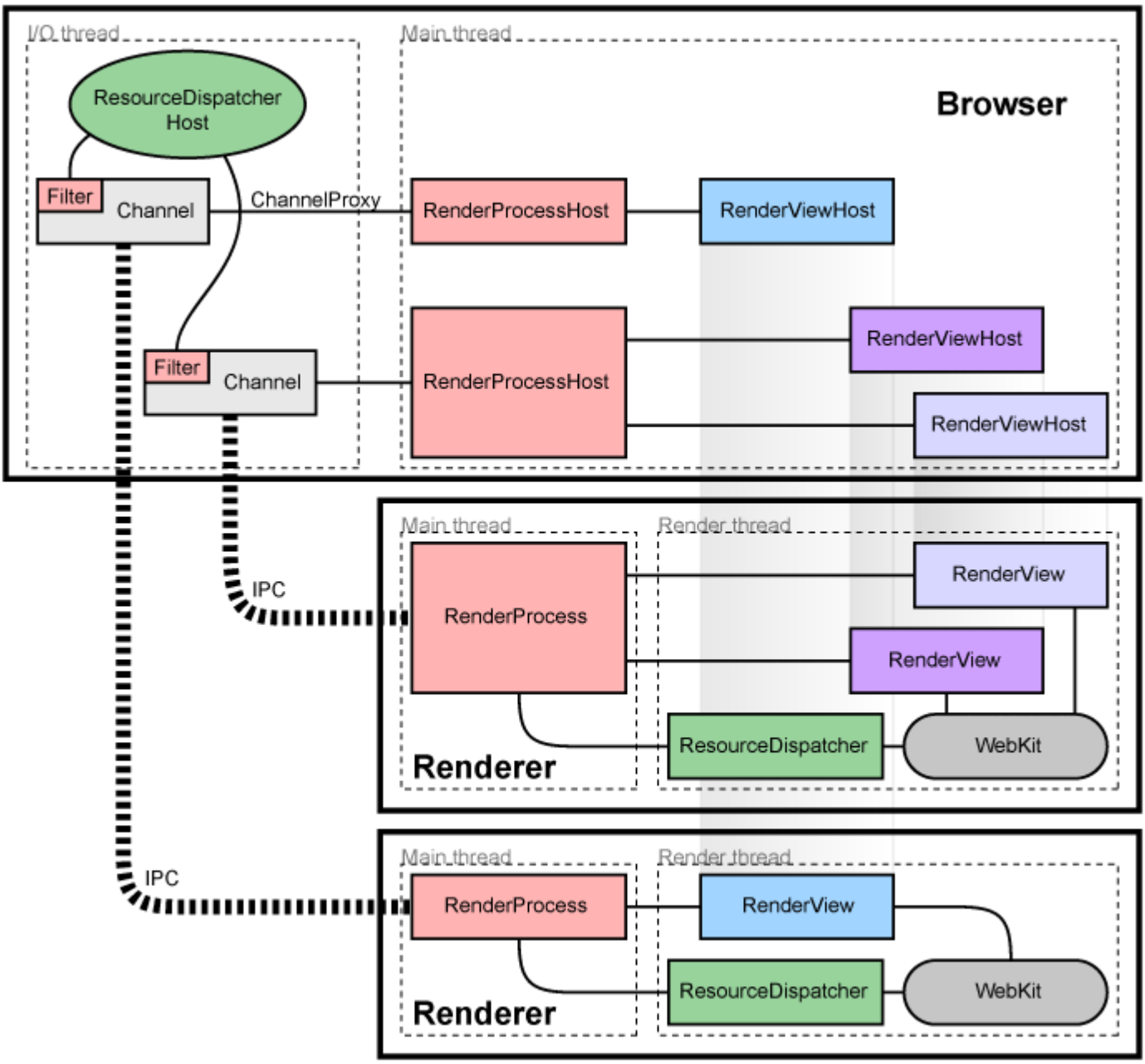
Interesting links can be:

http://www.chromium.org/developers/design-documents/multi-pr ocess-architecture

http://code.google.com/p/chromiumembedded/

File Attachments

1) arch.png, downloaded 3763 times



Subject: Re: Chromium embedded in U++
Posted by mirek on Wed, 30 Mar 2011 08:55:14 GMT
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tojocky wrote on Tue, 29 March 2011 12:46Hello All,

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Subject: Re: Chromium embedded in U++
Posted by dolik.rce on Wed, 30 Mar 2011 09:12:34 GMT
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mirek wrote on Wed, 30 March 2011 10:55I guess it would much more useful to integrate webkit... (which was proposed in the past, but never really done).
Using chromium renderer is almost the same integrating webkit... you get the same engine plus few cool features as a bonus. The question here is what is simpler to do.

I know I have been talking about webkit integration a lot, but never wrote any code (apart from JavaScriptCore). The main reason why I never started is that I know I don't have enough time to dive into the webkit codebase for several months What Ion proposes could shorten that time, so it is IMHO worthed to think about it.

Honza

Subject: Re: Chromium embedded in U++
Posted by tojocky on Wed, 30 Mar 2011 14:44:41 GMT
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mirek wrote on Wed, 30 March 2011 11:55
I guess it would much more useful to integrate webkit... (which was proposed in the past, but never really done).

Mirek,

What about V8 JavaScript performance, WebGL accelerate, etc.?
Your idea is to implement a lot of hard work what Google already done and tested.

Or I'm wrong?

Subject: Re: Chromium embedded in U++
Posted by tojocky on Wed, 30 Mar 2011 15:18:19 GMT
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Thanks to Honza for hint to analyze Google Chrome Frame. It is included in Internet Explorer Browser and communicate via IPC.

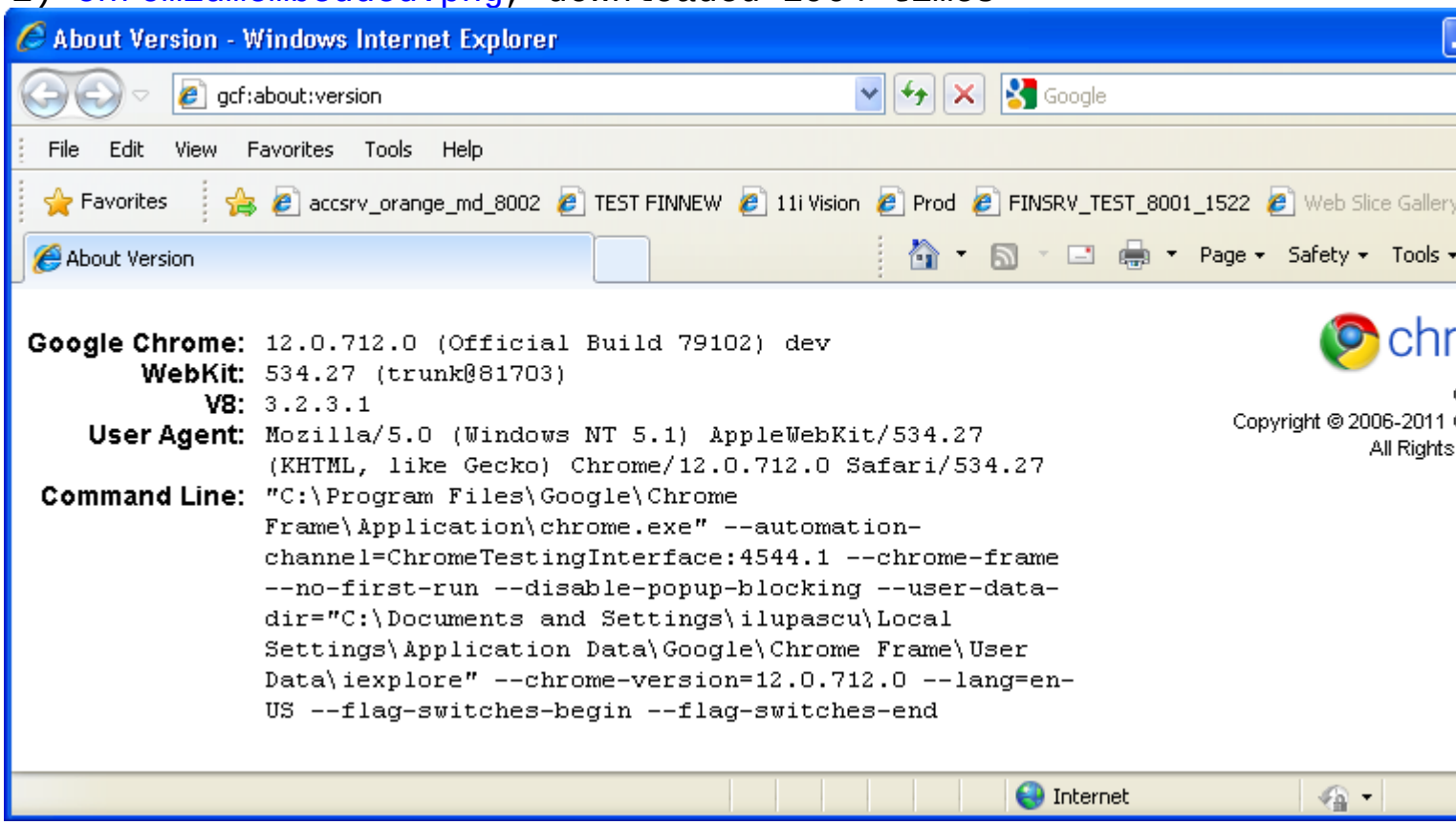
It seems that IE plug-in runs already reduced render chrome process. by command line:

"C:\Program Files\Google\Chrome Frame\Application\chrome.exe" --automation-channel=ChromeTestingInterface:4544.1 --chrome-frame --no-first-run --disable-popup-blocking --user-data-dir="C:\Documents and Settings\ilupascu\Local Settings\Application Data\Google\Chrome Frame\User Data\iexplore" --chrome-version=12.0.712.0 --lang=en-US --flag-switches-begin --flag-switches-end

The interesting part: Is possible to compile google Chrome frame in other OS?

File Attachments

1) chromiumembedded.png, downloaded 2964 times



Subject: Re: Chromium embedded in U++
Posted by dolik.rce on Wed, 30 Mar 2011 15:48:36 GMT
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It is not very likely that Chrome Frame could be compiled under non-windows systems, but even looking at the code can give us a lot of information. Ion, did you look how does the architecture work? I assume that the chrome.exe provides just UI etc. and the rendering is separated in the renderer processes, is that right? If yes, we could just copy the interface and wrap it in U++...

Honza

Subject: Re: Chromium embedded in U++
Posted by mirek on Thu, 31 Mar 2011 07:27:13 GMT
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dolik.rce wrote on Wed, 30 March 2011 05:12mirek wrote on Wed, 30 March 2011 10:55I guess it would much more useful to integrate webkit... (which was proposed in the past, but never really done).
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Honza

Well, I guess the question is that we already have similiar solution with IE and Firefox, at least in Win32...

Mirek

Subject: Re: Chromium embedded in U++
Posted by tojocky on Fri, 01 Apr 2011 12:23:06 GMT
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Verifying the exes and dlls from C:\Program Files\Google\Chrome Frame\Application\ it seems to be the original Chrome files.

After that I downloaded the source code and find that it support NPAPI ActiveX, and ActiveDocs.

It is a good news because we can use NPAPI plugin to embed Chrome.

Some interesting links here:
http://googlesystem.blogspot.com/2009/09/chrome-frame-not-ju st-for-internet.html
http://src.chromium.org/viewvc/chrome/trunk/src/chrome_frame /

dolik.rce wrote on Wed, 30 March 2011 18:48Ion, did you look how does the architecture work? I assume that the chrome.exe provides just UI etc. and the rendering is separated in the renderer processes, is that right? If yes, we could just copy the interface and wrap it in U++...
Honza

Yes, You are right Honza.

Subject: Chromium Embedded Framework (CEF)

Posted by xtradev on Wed, 28 Dec 2011 08:50:40 GMT
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There is an interesting project on Google Code: Chromium Embedded Framework (a framework for embedding chromium browser windows in other applications). Please, look at it.

- Roman

Subject: Re: Chromium Embedded Framework (CEF)
Posted by dolik.rce on Wed, 28 Dec 2011 09:41:20 GMT
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xtradev wrote on Wed, 28 December 2011 09:50There is an interesting project on Google Code: Chromium Embedded Framework (a framework for embedding chromium browser windows in other applications). Please, look at it.

- Roman
Hi Roman,

Welcome to the forum

I am following the development of this project quite closely, but for some reason I have trouble building it on my Arch linux box. Any help would be more than welcome, if you ever tried to build it...

It looks like a promising tool that could allow easy webkit integration into U++ (by "easy" I mean orders of magnitude easier than starting with vanilla webkit or chromium sources).

Best regards,
Honza

Subject: Re: Chromium embedded in U++
Posted by lectus on Wed, 28 Dec 2011 15:50:29 GMT
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mirek wrote on Wed, 30 March 2011 04:55I guess it would much more useful to integrate webkit... (which was proposed in the past, but never really done).

+1

We really need a Upp Webkit control with simple usage through methods like webkitctrl1.LoadURL("http://www.ultimatepp.org/").

Subject: Re: Chromium Embedded Framework (CEF)
Posted by tojocky on Thu, 29 Dec 2011 14:40:56 GMT
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Hello,

This solution, I think, is not the right solution which should be.
A better solution is to "run" already installed chromium browser and communicate throw IPC. In theory is possible. In practice I didn't tested because I work 120% in a project.

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Subject: Re: Chromium Embedded Framework (CEF)
Posted by dolik.rce on Fri, 30 Dec 2011 10:33:23 GMT
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tojocky wrote on Thu, 29 December 2011 15:40This solution, I think, is not the right solution which should be.
A better solution is to "run" already installed chromium browser and communicate throw IPC. In theory is possible. In practice I didn't tested because I work 120% in a project.
I'm afraid that in most cases relying that chromium is installed on the end user system (and has correct version) is not very good idea. CEF is just a library that can be packaged and shipped with your application easily, so you always know that your html rendering will work everywhere.

Honza

Subject: Re: Chromium embedded in U++
Posted by Anonymous on Sun, 10 Jun 2012 15:13:09 GMT
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mirek wrote on Wed, 30 March 2011 10:55tojocky wrote on Tue, 29 March 2011 12:46Hello All,

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The information is very interesting. Thanks for sharing the info.

Subject: Re: Chromium embedded in U++
Posted by tojocky on Sun, 10 Jun 2012 17:32:20 GMT

wokari wrote on Sun, 10 June 2012 18:13
The information is very interesting. Thanks for sharing the info.

You are welcome.
Unfortunately I didn't had a real task to embed a browser in C++... and also I didn't had time for testing this one.
Looking in the Chromium source-code, IPC and display part (browser) is too close/dependent to all the code.
To simplify the things, I would propose to use libuv for IPC and to parse and display data on the C++ layout.

Mirek had proposed to use WebKit but I'm afraid that this is a lot of work. Mirek looks from stability and dependents point of view.

Also you are welcome to share your ideas and your work.

Ion.