Subject: v8 JavaScript in U++
Posted by tojocky on Mon, 09 May 2011 11:06:51 GMT

Hello All,

v8 JavaScript can be integrated in U++.
I use shared library of v8 because it take less space.

I have attached a simple example with screen shot.

To run this example need to have a builded v8 3.3.4.0, add in include folders v8.lib (for windows) and run.

To run a simple JavaScript code is simple:

```
V8JS::Locker locker;
V8JS::HandleValue result = curr_V8JS.Execute(CodeForExecution.GetData());
if(curr_V8JS.IsError()){
 PromptOK(DeQtf(Format("JavaScriptError: %s", curr_V8JS.GetLastError())));
}
```

I added some functions(system.write(), alert(), ...) and handlers(onexit());

Any comment are welcome.

File Attachments
1) v8_test.PNG, downloaded 1329 times

Subject: Re: v8 JavaScript in U++
Posted by tojocky on Mon, 09 May 2011 11:58:28 GMT

Added sourcecode

File Attachments
1) JS_src.zip, downloaded 501 times

Subject: Re: v8 JavaScript in U++
Posted by kohait00 on Mon, 09 May 2011 12:32:53 GMT

cool thing.. ever thought of exposing upp to JS8? i'm currently tackling it in python

Subject: Re: v8 JavaScript in U++
Posted by tojocky on Mon, 09 May 2011 12:40:39 GMT

kohait00 wrote on Mon, 09 May 2011 15:32cool thing.. ever thought of exposing upp to JS8? i'm currently tackling it in python
V8 JS seems to be very promised. the code can be be compiled under many processors, the compiled code can be stored and restored to minimize compile time.

JavaScript seems to be very flexible by modifying objects instance on run-time and do not have strong type variables.

Subject: Re: v8 JavaScript in U++
Posted by tojocky on Mon, 09 May 2011 13:24:58 GMT

Added builded v8 for win32

```
File Attachments
1) v8_3_3_4_0_win32_library_shared.zip, downloaded 523 times
```

Subject: Re: v8 JavaScript in U++
Posted by mirek on Mon, 09 May 2011 15:58:24 GMT

tojocky wrote on Mon, 09 May 2011 09:24Added builded v8 for win32

Perhaps would be nice to use it as script language in theide

Mirek

Subject: Re: v8 JavaScript in U++
Posted by tojocky on Tue, 10 May 2011 07:05:07 GMT

mirek wrote on Mon, 09 May 2011 18:58tojocky wrote on Mon, 09 May 2011 09:24Added builded v8 for win32

Perhaps would be nice to use it as script language in theide

Mirek

Yes, it would be nice.

Subject: Re: v8 JavaScript in U++
Posted by tojocky on Tue, 10 May 2011 08:28:54 GMT
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Added builded v8 for linx32 (ubuntu 10.10)

Subject: Re: v8 JavaScript in U++
Posted by tojocky on Tue, 10 May 2011 08:40:25 GMT
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and a screenshot for linux:

To make work the preview sources need to change order from:

#include <CtrlLib/CtrlLib.h>
#include <V8JS/V8JS.h>
#include <V8JS/macros.h>

to:

#include <V8JS/V8JS.h>
#include <V8JS/macros.h>

#include <CtrlLib/CtrlLib.h>

and copy the attached library to location:
sudo cp libv8.so /usr/lib/libv8.so

P.S. Under the linux I see a problem. found some memory leaks.

Subject: Re: v8 JavaScript in U++
Posted by Lance on Sat, 11 Jun 2011 22:15:29 GMT
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Beautiful! It works for me, simpler than I had expected.

I did the test on Windows. Interesting enough, when I directly run the generated exe file,

everything is fine. But when I try to run it from TheIDE, it crushes TheIDE, repeatedly. Any idea what I might have done wrong?

Thank again for the great job.

Subject: Re: v8 JavaScript in U++
Posted by Lance on Sun, 12 Jun 2011 18:59:24 GMT

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Never mind. v8 might not be right for my situation. I need a scripting language that can call external library functions, eg, a function written in C++ in the host program. Doesn't v8 provide mechanism to interface at least _cdecl functions? Can you provide some example. That would be truly interesting and useful.

kohait's python package may be able to do that.

Subject: Re: v8 JavaScript in U++
Posted by tojocky on Mon, 13 Jun 2011 07:00:18 GMT

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Lance wrote on Sun, 12 June 2011 21:59Never mind. v8 might not be right for my situation. I need a scripting language that can call external library functions, eg, a function written in C++ in the host program. Doesn't v8 provide mechanism to interface at least _cdecl functions? Can you provide some example. That would be truly interesting and useful.

kohait's python package may be able to do that.
You can do this in c++ and wrap into v8. this is done in v8cgi, node.js. I planned to do too.

I will keep you informed when I done this part of job.

Subject: Re: v8 JavaScript in U++
Posted by tojocky on Mon, 13 Jun 2011 07:01:34 GMT

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Lance wrote on Sun, 12 June 2011 01:15Beautiful! It works for me, simpler than I had expected.

I did the test on Windows. Interesting enough, when I directly run the generated exe file, everything is fine. But when I try to run it from TheIDE, it crushes TheIDE, repeatedly. Any idea what I might have done wrong?

Thank again for the great job.
What exactly crashes? can you upload the log file? in my case it works without any errors.

Subject: Re: v8 JavaScript in U++
Posted by Lance on Tue, 14 Jun 2011 13:52:41 GMT

tojocky wrote on Mon, 13 June 2011 09:01Lance wrote on Sun, 12 June 2011 01:15Beautiful! It works for me, simpler than I had expected.

I did the test on Windows. Interesting enough, when I directly run the generated exe file, everything is fine. But when I try to run it from TheIDE, it crushes TheIDE, repeatedly. Any idea what I might have done wrong?

Thank again for the great job.
What exactly crashes? can you upload the log file? in my case it works without any errors.

Hi tojockyL:

Interesting enough, this time it is just fine.

I guess the problem was with environment variable PATH. I set PATH for the v8js.dll(?) which is immediately available to the test program if launched from Windows Explorer directly, but somehow TheIDE will remember the OLD PATH value before system reboots (strange enough)

Subject: Re: v8 JavaScript in U++
Posted by Lance on Tue, 14 Jun 2011 13:54:55 GMT

tojocky wrote on Mon, 13 June 2011 09:00Lance wrote on Sun, 12 June 2011 21:59Never mind. v8 might not be right for my situation. I need a scripting language that can call external library functions, eg, a function written in C++ in the host program. Doesn't v8 provide mechanism to interface at least _cdecl functions? Can you provide some example. That would be truly interesting and useful.

kohait's python package may be able to do that.
You can do this in c++ and wrap into v8. this is done in v8cgi, node.js. I planned to do too.

I will keep you informed when I done this part of job.

Thanks! It's very important.

Subject: Re: v8 JavaScript in U++
Posted by tojocky on Tue, 14 Jun 2011 18:22:24 GMT

Lance wrote on Tue, 14 June 2011 16:52Hi tojockyL:

Interesting enough, this time it is just fine.

I guess the problem was with environment variable PATH. I set PATH for the v8js.dll(?) which is immediately available to the test program if launched from Windows Explorer directly, but somehow TheIDE will remember the OLD PATH value before system reboots (strange enough)

As a solution put the dll in c:\windows directory or in the same location with executable. Another solution is to modify PATH variable and restart the windows.

A better solution is to use v8 library in executable (added as task to me).

Subject: Re: v8 JavaScript in U++
Posted by Lance on Wed, 15 Jun 2011 12:21:47 GMT
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tojocky wrote on Tue, 14 June 2011 20:22
As a solution put the dll in c:\windows directory or in the same location with executable. Another solution is to modify PATH variable and restart the windows.

A better solution is to use v8 library in executable (added as task to me).

Yes, I used the third way, separate folder with path environment variable set. I just missed the reboot part.

Do you mean you are working on options to build v8 libary into executable (static link) just like Esc? That will be interesting. When all are done, I will certainly consider switch back as JavsScript is a more industry standard thing.

Subject: Re: v8 JavaScript in U++
Posted by ratah on Mon, 08 Aug 2011 13:13:45 GMT
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Hello,

It compiles only with VC8.
I want to use it with mingw, how to do.
Thanks

Subject: Re: v8 JavaScript in U++
Posted by tojocky on Mon, 08 Aug 2011 15:07:54 GMT

ratah wrote on Mon, 08 August 2011 16:13Hello,

It compiles only with VC8.
I want to use it with mingw, how to do.
Thanks
Exists some tricks. I will test and upload the detailed steps.