

Ruby trunk - Feature #3731

Easier Embedding API for Ruby

08/22/2010 07:16 AM - Beoran (Beoran Aegul)

Status:	Assigned	
Priority:	Normal	
Assignee:	ko1 (Koichi Sasada)	
Target version:		
Description =begin With Ruby 1.9, it has become more difficult to embed Ruby in a C application correctly. It would be nice if there was a clearly documented and simple C API to embed ruby in C programs. I know Ruby was not designed from the start to be embedded, but Ruby was used before in several products as an embedded scripting language. It should therefore be possible to do so in a more straightforward way. Kind Regards, B. =end		
Related issues: Related to Ruby trunk - Feature #7424: an embedded Ruby interpreter doesn't g... Closed		

History

#1 - 08/22/2010 07:58 AM - asher (Asher Haig)

What is difficult about this?

Example:

```
#include <ruby.h>

int main( int argc __attribute__((unused)), char *argv[] __attribute__((unused)) ) {

    ruby_init();

    // Ruby Options are just like /usr/bin/ruby
    // interpreter name, script name, argv ...
    char*  options[] = { "", "rpdom_test.rb", };
    void*  node      = ruby_options( 2, options );

    return ruby_run_node( node );
}
```

Struck me as potentially a documentation issue, but the actual functionality I think is pretty straightforward?

Asher

#2 - 08/22/2010 05:36 PM - Beoran (Beoran Aegul)

Dear Asher,

Well, I certainly agree documentation should be improved for this use case! :)

However, the problem with what you suggest is that it doesn't work more than once.

For example; I get a segmentation violation (crash) with a "You may encounter a bug of Ruby interpreter."

on the second call to ruby_run_node();

if I try this on a ruby1.9.1 p0:

```
#include <ruby.h>

RUBY_GLOBAL_SETUP
int main( int argc __attribute__((unused)), char *argv[] __attribute__((unused)) ) {
    RUBY_INIT_STACK
    ruby_init();
}
```

```
{
  char*  options[]  = { "", "-e", "puts 'hello'" };
  void*  node       = ruby_options( 2, options );
  char*  options2[] = { "", "-e", "puts 'world'" };
  void*  node2      = ruby_options( 2, options2 );
  ruby_run_node( node );
  ruby_run_node( node2 );
}
```

It may be that this bug is fixed in later versions, but I still have to install them to try.

Another problem is that it's a rather unwieldy API. It's nicer if you can run multiple scripts, or call `rb_eval_string` multiple times. It's also nice if you can catch syntax errors in the ruby files loaded and handle them on the C side.

Kind Regards,

B.

#3 - 08/27/2010 12:38 PM - shyouhei (Shyouhei Urabe)

- Status changed from Open to Feedback

#4 - 03/18/2012 06:06 PM - nahi (Hiroshi Nakamura)

- Description updated

- Category set to core

- Status changed from Feedback to Open

- Assignee set to ko1 (Koichi Sasada)

- Target version set to 2.0.0

#5 - 03/18/2012 06:46 PM - shyouhei (Shyouhei Urabe)

- Status changed from Open to Assigned

#6 - 06/26/2012 04:38 AM - ko1 (Koichi Sasada)

I'll write document for embedding Ruby on your application.

At first, in Japanese,

Second, translate in English.

Please revise it after I finished.

#7 - 10/27/2012 05:48 AM - ko1 (Koichi Sasada)

- Priority changed from Normal to 5

Ah, sorry for pending.

I need one more body (brain?) of myself.

#8 - 11/24/2012 09:39 AM - mame (Yusuke Endoh)

- Target version changed from 2.0.0 to 2.6

ko1, I think you are not divided yet.

This looks a big feature. I'm setting this to next minor.

Please try it if you have time after you finished other tasks.

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Yusuke Endoh mame@tsg.ne.jp

#9 - 12/25/2017 06:14 PM - naruse (Yui NARUSE)

- Target version deleted (2.6)