Backport187 - Backport #2247

Fixing compiler warnings

10/22/2009 12:59 AM - kot (Міхаіл Т.)

Status:	Closed	
Priority:	Normal	
Assignee:	shyouhei (Shyouhei Urabe)	

Description

=begin
When debugging a problem, gratuitous compiler warnings often get in the way by obscuring real problems.

This is why projects should try to eliminate them -- so that when a new one pops up, such as when new code is added, or the build is performed on a new platform -- the issue can attract its due attention.

The attached patch fixes warnings, that I observed compiling with ``-Wall -Werror'' on RHEL-5.4/x86_64 system. Please, consider merging these changes in.

The addressed problems are:

- rb_thread_join was not declared (intern.h) with the rest of the rb_thread functions. Private declarations existed in some C-files...
- The PUSH_FRAME duly defined the local variable _frame as volatile. However, when the value of _frame was assigned to the global ruby_frame, this qualifier was lost. There were as many warnings about this, as there are invocations of the PUSH_FRAME macro.
- The little thread_timer() function MUST be declared as returning void*, because it is passed to pthread_create(). Compiler warned, that a non-void function lacked the return-statement. I added one...
- regex.c in its error reporting tried to print ptrdiff_t value as int. On 64-bit platforms ptrdiff_t is, usually, long int, but that's an impossibly large value for a regular expression's length. Explicit casting of the pointer-difference down to int should be fine.
- parse.y defined an unused static function arg_prepend()

Also, when compiling with a recent gcc at optimization level -O2 (or higher), util.c throws a number of warnings about breaking strict-aliasing rules. There is no /easy/ fix for this, but the work-around is to simply compile that one file with -fno-strict-aliasing (or whatever flag is needed for this with non-gcc compilers). A /sample/ patch for this issue is attached separately.

Thanks! Yours,

        —mi

=end

History

#1 - 10/22/2009 05:45 PM - nobu (Nobuyoshi Nakada)

=begin

At Thu, 22 Oct 2009 00:59:42 +0900,
Mikhail T. redmine@ruby-lang.org wrote in [ruby-core:26217]:

> The attached patch fixes warnings, that I observed compiling
> with ``-Wall -Werror'' on RHEL-5.4/x86_64 system. Please,
> consider merging these changes in.

Thank you.

> The addressed problems are:

>> - rb_thread_join was not declared (intern.h) with the rest of the rb_thread functions. Private declarations existed in some C-files...

Applied in r25431.

- The PUSH_FRAME duly defined the local variable _frame as volatile. However, when the value of _frame was assigned to the global ruby_frame, this qualifier was lost. There were as many warnings about this, as there are invocations of the PUSH_FRAME macro.

Fixed in r17831.

- The little thread_timer() function MUST be declared as returning void*, because it is passed to pthread_create(). Compiler warned, that a non-void function lacked the return-statement. I added one...

Fixed in r23201.

- regex.c in its error reporting tried to print ptrdiff_t value as int. On 64-bit platforms ptrdiff_t is, usually, long int, but that's an impossibly large value for a regular expression's length. Explicit casting of the pointer-difference down to int should be fine.

Fixed in r20465

- parse.y defined an unused static function arg_prepend()

Applied in r25432.

    Also, when compiling with a recent gcc at optimization level
    -O2 (or higher), util.c throws a number of warnings about
    breaking strict-aliasing rules. There is no /easy/ fix for
    this, but the work-around is to simply compile that one file
    with -fno-strict-aliasing (or whatever flag is needed for
    this with non-gcc compilers). A /sample/ patch for this issue
    is attached separately.

Fixed in r23353.

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Nobu Nakada

=end

#2 - 10/22/2009 05:50 PM - nobu (Nobuyoshi Nakada)

- Status changed from Open to Assigned

- Assignee set to shyouhei (Shyouhei Urabe)

=begin

=end

#3 - 10/29/2009 06:10 AM - kot (Міхаіл Т.)

- File patch-ruby-openssl added

=begin
The attached new patch almost fixes the OpenSSL-extension. The bulk of it is casts from char* to unsigned char*
with some const-ification thrown in.

This should help concentrate on fixing /real/ problems, such as:

gcc44 -I. -I../.. -I/home/mteterin/ruby-1.8.7-p174 -I/home/mteterin/ruby-1.8.7-p174/ext/openssl -DRUBY_EXTCONF_H=\"extconf.h\"   -fPIC -O2 -Wall
-Wno-unused -Werror -pipe -march=nocona   -c /home/mteterin/ruby-1.8.7-p174/ext/openssl/ossl_pkey_dh.c
cc1: warnings being treated as errors
ext/openssl/ossl_pkey_dh.c: In function 'ossl_dh_initialize':
ext/openssl/ossl_pkey_dh.c:173: error: function called through a non-compatible type
ext/openssl/ossl_pkey_dh.c:173: note: if this code is reached, the program will abort
ext/openssl/ossl_pkey_dh.c: In function 'ossl_dh_to_public_key':
ext/openssl/ossl_pkey_dh.c:333: error: function called through a non-compatible type
ext/openssl/ossl_pkey_dh.c:333: note: if this code is reached, the program will abort
make: *** [ossl_pkey_dh.o] Помилка 1

The above problems -- triggered in several files -- seem to be with OpenSSL, rather than Ruby or its openssl-extension. I'm unsure, if any
work-around is possible. These are NOT fixed by the attached patch.
=end

#4 - 10/29/2009 11:40 AM - nobu (Nobuyoshi Nakada)
=begin
backport r18168?
=end

#5 - 10/31/2009 01:02 AM - kot (Міхаіл Т.)

=begin

    backport r18168?

Sorry, I'm unsure, what you mean :(If you suggest, I build a snapshot of the repository -- sorry, I can't do that. We only deal with /released/ versions here -- patched, if need be... Maybe, it is time for another patch-release for the 1.8.7pX branch?

Thanks!
=end

#6 - 10/31/2009 03:33 AM - kot (Міхаіл Т.)

=begin
Also, each occurrence of BIO_reset() triggers a warning like:

ext/openssl/ossl_pkey_dh.c: In function 'ossl_dh_initialize':
ext/openssl/ossl_pkey_dh.c:172: error: value computed is not used

The following command (on Linux -- requires pcre in grep) silences all of them at once:

find ext/openssl -type f -name '*.c' | xargs grep -P -l '\sBIO_reset' | xargs perl -p -i.iorig -e 's/(\s)BIO_reset/\1(void)BIO_rest/'

It changes BIO_reset to (void)BIO_reset...
=end

#7 - 12/21/2016 05:14 AM - shyouhei (Shyouhei Urabe)

- Status changed from Assigned to Closed

Files

patch-warnings	2.42 KB	10/22/2009	kot (Міхаіл Т.)
patch-Makefile.in	484 Bytes	10/22/2009	kot (Міхаіл Т.)
patch-ruby-openssl	31.2 KB	10/29/2009	kot (Міхаіл Т.)