

Backport21 - Backport #9640

Please backport SSL fixes to 2.1

03/15/2014 11:21 AM - zeha (Christian Hofstaedtler)

Status:	Closed	
Priority:	Normal	
Assignee:	nagachika (Tomoyuki Chikanaga)	
Description		
Please backport the fixes for issue #9424 to 2.1.		
https://bugs.ruby-lang.org/projects/ruby-trunk/repository/revisions/45274/diff/ext/openssl/lib/openssl/ssl.rb		
Related issues:		
Related to Ruby master - Feature #9613: Warn about unsafe ossl ciphers		Open
Related to Ruby master - Bug #9424: ruby 1.9 & 2.x has insecure SSL/TLS clien...		Closed 01/17/2014

Associated revisions

Revision c8137d67 - 10/22/2014 02:14 PM - nagachika (Tomoyuki Chikanaga)

merge revision(s) r45274,r45278,r45280,r48097: [Backport #9424] [Backport #9640]

```
* lib/openssl/ssl.rb: Explicitly whitelist the default
SSL/TLS ciphers. Forbid SSLv2 and SSLv3, disable
compression by default.
Reported by Jeff Hodges.
[ruby-core:59829] [Bug #9424]
```

```
* test/openssl/test_ssl.rb: Reuse TLS default options from
OpenSSL::SSL::SSLContext::DEFAULT_PARAMS.
```

```
* ext/openssl/lib/openssl/ssl.rb (DEFAULT_PARAMS): override
options even if OpenSSL::SSL::OP_NO_SSLv3 is not defined.
this is pointed out by Stephen Touset. [ruby-core:65711] [Bug #9424]
```

git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/branches/ruby_2_1@48098 b2dd03c8-39d4-4d8f-98ff-823fe69b080e

Revision 48098 - 10/22/2014 02:14 PM - nagachika (Tomoyuki Chikanaga)

merge revision(s) r45274,r45278,r45280,r48097: [Backport #9424] [Backport #9640]

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History

#1 - 03/16/2014 03:08 AM - hsbt (Hiroshi SHIBATA)

It seems to break backward compatibility.

#2 - 03/16/2014 04:06 AM - zzak (Zachary Scott)

- Status changed from Open to Rejected

Please Don't report issues here.

Also, there is already a ticket to discuss this patch in [#9613](#)

#3 - 03/17/2014 01:39 PM - hsbt (Hiroshi SHIBATA)

- Status changed from Rejected to Open

zzak

You shouldn't change status of backport issue by yourself. It's branch maintainer's work.

#4 - 03/17/2014 06:54 PM - naruse (Yui NARUSE)

- Related to Feature #9613: Warn about unsafe ossl ciphers added

#5 - 03/17/2014 06:55 PM - naruse (Yui NARUSE)

- Related to Bug #9424: ruby 1.9 & 2.x has insecure SSL/TLS client defaults added

#6 - 03/17/2014 07:03 PM - naruse (Yui NARUSE)

Zachary Scott wrote:

Please Don't report issues here.

If the ticket is really backport ticket, here is correct place;
and this ticket is actually a backport ticket.

#7 - 03/18/2014 04:53 AM - zzak (Zachary Scott)

Sorry for the misunderstanding, I think we should discuss it on trunk first.

Also, I don't believe the current patch (as-is) should be backported.

On Mar 17, 2014, at 7:09 PM, shibata.hiroshi@gmail.com wrote:

Issue [#9640](#) has been updated by Hiroshi SHIBATA.

Status changed from Rejected to Open

zzak

You shouldn't change status of backport issue by yourself. It's branch maintainer's work.

Backport [#9640](#): Please backport SSL fixes to 2.1
<https://bugs.ruby-lang.org/issues/9640#change-45837>

- Author: Christian Hofstaedtler
- Status: Open
- Priority: Normal

*** Assignee:**

Please backport the fixes for issue [#9424](#) to 2.1.

<https://bugs.ruby-lang.org/projects/ruby-trunk/repository/revisions/45274/diff/ext/openssl/lib/openssl/ssl.rb>

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<http://bugs.ruby-lang.org/>

#8 - 10/15/2014 06:15 AM - reed (Reed Loden)

Since the POODLE attack was released today (and is causing folks to generally disable SSLv3 everywhere), any possibility of getting the patch backported to a current stable release of Ruby so people can be protected against it and other problems?

#9 - 10/18/2014 05:50 PM - nagachika (Tomoyuki Chikanaga)

I thought before it cannot be backported because it seems to cause compatibility issues.
But now I feel the necessity of rethink about it according to the change of circumstance (ex. POODLE).

I think users can protect themselves via configuration or update OpenSSL itself, not the by ruby C extension library. Is it correct?

I think r45274 changes only default settings, so users who need SSLv3 or old ciphers have some workarounds, for example via `Net::HTTP#ssl_version=` or `Net::HTTP#ciphers=`). Is it correct?

#10 - 10/19/2014 03:54 AM - usa (Usaku NAKAMURA)

Tomoyuki Chikanaga wrote:

But now I feel the necessity of rethink about it according to the change of circumstance (ex. POODLE).

I feel so, too.

I think users can protect themselves via configuration or update OpenSSL itself, not the by ruby C extension library. Is it correct?

`ext/openssl(/lib/openssl/ssl.rb)` actually sets the default of ciphers, so changing them of OpenSSL itself is meaningless about us. Am I wrong?

I think r45274 changes only default settings, so users who need SSLv3 or old ciphers have some workarounds, for example via `Net::HTTP#ssl_version=` or `Net::HTTP#ciphers=`). Is it correct?

Since `net/http` does not have the interface to change the ciphers at the moment, available workaround should be a complex monkey patch, I guess.

#11 - 10/19/2014 02:27 PM - nagachika (Tomoyuki Chikanaga)

I think users can protect themselves via configuration or update OpenSSL itself, not the by ruby C extension library. Is it correct?

`ext/openssl(/lib/openssl/ssl.rb)` actually sets the default of ciphers, so changing them of OpenSSL itself is meaningless about us. Am I wrong?

Thank you for pointing out that. It seems that I misunderstood about the point. So I think we *should* backport the change.

Since `net/http` does not have the interface to change the ciphers at the moment, available workaround should be a complex monkey patch, I guess.

Yes. But I think the workaround to do something potentially dangerous could be complicated. Users should know what they really to do.

#12 - 10/19/2014 03:10 PM - usa (Usaku NAKAMURA)

Tomoyuki Chikanaga wrote:

Yes. But I think the workaround to do something potentially dangerous could be complicated. Users should know what they really to do.

agreed.

So, the way to do is:

- backport this patch
- say "if you have some trouble, revert this patch by yourself in your own risk"

#13 - 10/22/2014 01:34 PM - nagachika (Tomoyuki Chikanaga)

- Status changed from Open to Assigned

- Assignee set to nagachika (Tomoyuki Chikanaga)

OK, I'll handle this ticket.
And I filled the 'Backport' field of [#9424](#) too.

#14 - 10/22/2014 02:15 PM - nagachika (Tomoyuki Chikanaga)

- Status changed from Assigned to Closed

- % Done changed from 0 to 100

Applied in changeset [r48098](#).

merge revision(s) r45274,r45278,r45280,r48097: [Backport [#9424](#)] [Backport [#9640](#)]

- * lib/openssl/ssl.rb: Explicitly whitelist the default SSL/TLS ciphers. Forbid SSLv2 and SSLv3, disable compression by default. Reported by Jeff Hodges. [ruby-core:59829] [Bug #9424]
- * test/openssl/test_ssl.rb: Reuse TLS default options from OpenSSL::SSL::SSLContext::DEFAULT_PARAMS.
- * ext/openssl/lib/openssl/ssl.rb (DEFAULT_PARAMS): override options even if OpenSSL::SSL::OP_NO_SSLv3 is not defined. this is pointed out by Stephen Touset. [ruby-core:65711] [Bug #9424]