Ruby master - Feature #6617

Net::HTTP: Bind to a specific local IP/port

06/21/2012 11:15 AM - mksm (Ricardo Amorim)

Status: Closed
Priority: Normal
Assignee: naruse (Yui NARUSE)
Target version: 2.0.0

Description
Despite having several solutions floating around the net, this feature is currently not present in Net::HTTP. I searched the issues but didn't find any discussion on this. How does the dev team feel about this? Can I submit a patch for revision?

Related issues:
Related to Ruby master - Bug #6746: test_bind_to_local_host[TestNetHTTPLocalB...
Closed 07/17/2012

Associated revisions
Revision 46898537 - 07/11/2012 06:37 PM - naruse (Yui NARUSE)
- lib/net/http.rb (Net::HTTP#connect): use local_host and local_port if specified. patched by Ricardo Amorim [Feature #6617]
  git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/trunk@36367 b2dd03c8-39d4-4d8f-98ff-823fe69b080e

Revision 36367 - 07/11/2012 06:37 PM - naruse (Yui NARUSE)
- lib/net/http.rb (Net::HTTP#connect): use local_host and local_port if specified. patched by Ricardo Amorim [Feature #6617]

Revision 36367 - 07/11/2012 06:37 PM - naruse (Yui NARUSE)
- lib/net/http.rb (Net::HTTP#connect): use local_host and local_port if specified. patched by Ricardo Amorim [Feature #6617]

Revision 36367 - 07/11/2012 06:37 PM - naruse (Yui NARUSE)
- lib/net/http.rb (Net::HTTP#connect): use local_host and local_port if specified. patched by Ricardo Amorim [Feature #6617]

Revision 36367 - 07/11/2012 06:37 PM - naruse (Yui NARUSE)
- lib/net/http.rb (Net::HTTP#connect): use local_host and local_port if specified. patched by Ricardo Amorim [Feature #6617]

Revision 36367 - 07/11/2012 06:37 PM - naruse (Yui NARUSE)
- lib/net/http.rb (Net::HTTP#connect): use local_host and local_port if specified. patched by Ricardo Amorim [Feature #6617]

Revision 36367 - 07/11/2012 06:37 PM - naruse (Yui NARUSE)
- lib/net/http.rb (Net::HTTP#connect): use local_host and local_port if specified. patched by Ricardo Amorim [Feature #6617]

Revision 36367 - 07/11/2012 06:37 PM - naruse (Yui NARUSE)
- lib/net/http.rb (Net::HTTP#connect): use local_host and local_port if specified. patched by Ricardo Amorim [Feature #6617]

History
#1 - 06/22/2012 08:43 AM - drbrain (Eric Hodel)
- Category set to lib

Bind to a local port like TCPSocket.new does? I'm sure this feature could be added.

I think the easiest way to add it would result in an API like:

http = Net::HTTP.new remote_host
http.local_host = local_host
http.start do
  ...
end
Instead of passing the local host and port as parameters to Net::HTTP.new or Net::HTTP.start.

#2 - 06/22/2012 10:15 AM - mksm (Ricardo Amorim)
I agree. You can pass both local_ip and local_port to TCPSocket.open in Net::HTTP#connect.

Having the setter exposed would allow the user to change the local IP address between connections. Any ideas if this could cause problems with Net::HTTP or remote servers? There's also proxy and ipv6 support, both which I have never tested using this approach.

#3 - 06/26/2012 03:44 AM - mksm (Ricardo Amorim)
- File net-http_bind_to_local_ip.patch added

The patch adds accessors for @local_host and @local_port and uses both in TCPSocket.open call.

#4 - 06/26/2012 06:41 AM - drbrain (Eric Hodel)
- Assignee set to naruse (Yui NARUSE)
- Target version set to 2.0.0

#5 - 07/03/2012 01:14 PM - naruse (Yui NARUSE)
It looks good.
Could you provide a test for it?
It should be a patch for test/net/http/test_http.rb

#6 - 07/04/2012 07:07 PM - madeofcode (Mark Dodwell)
Forgive me if this is a silly question, but what is the point of initializing the instance variables to nil in the initializer?

#7 - 07/05/2012 12:05 AM - jballanc (Joshua Ballanco)
=begin
Not sure, but it may be related to this:
> >> defined?(@foo)
> => nil
> >> @foo = nil
> => nil
> >> defined?(@foo)
> => "instance-variable"
=end

#8 - 07/05/2012 02:19 PM - mksm (Ricardo Amorim)
- File net-http_bind_to_local_ip-tests.patch added

naruse (Yui NARUSE): tests attached! It seems that local_host cannot be nil when setting local_port in TCPSocket.open.
madeofcode (Mark Dodwell): I also do not know, just followed the pattern. jballanc may have a point, but i can't see why there would be #defined? checks on ivars.

#9 - 07/06/2012 04:49 AM - drbrain (Eric Hodel)
=begin
You need to initialize instance variables to prevent warnings on uninitialized access:

$ ruby -we 'p @x'
-e:1: warning: instance variable @x not initialized
nil
=end

#10 - 07/12/2012 03:37 AM - naruse (Yui NARUSE)
- Status changed from Open to Closed
- % Done changed from 0 to 100

This issue was solved with changeset r36367.
Ricardo, thank you for reporting this issue.
Your contribution to Ruby is greatly appreciated.
May Ruby be with you.
• lib/net/http.rb (Net::HTTP#connect): use local_host and local_port if specified. patched by Ricardo Amorim [Feature #6617]

**Files**

<table>
<thead>
<tr>
<th>Name</th>
<th>Size</th>
<th>Date</th>
<th>Author</th>
</tr>
</thead>
<tbody>
<tr>
<td>net-http_bind_to_local_ip.patch</td>
<td>1.25 KB</td>
<td>06/26/2012</td>
<td>mksm (Ricardo Amorim)</td>
</tr>
<tr>
<td>net-http_bind_to_local_ip-tests.patch</td>
<td>1.46 KB</td>
<td>07/05/2012</td>
<td>mksm (Ricardo Amorim)</td>
</tr>
</tbody>
</table>