Ruby master - Bug #11864

Resolv incorrectly accepts invalid hostnames and caches records between sessions

12/23/2015 01:37 AM - breadtk (Osman Surkatty)

Status: Third Party's Issue
Priority: Normal
Assignee: Target version:
ruby -v: 2.2.3p173 (2015-08-18 revision 51636) [x86_64-darwin14]
Backport: 2.0.0: UNKNOWN, 2.1: UNKNOWN, 2.2: UNKNOWN

Description
Hello,

While working on a DNS related project I noticed that Resolv's getaddresses() and getaddress() functions will incorrectly accepts an empty String and additionally returns a cached record if a new IRB session is invoked. Resolv correctly rejects nil or empty arguments, but I believe the issue here is that the validation of String should require at a minimum a single valid String character.

Here is an example of what I mean:

$ irb
irb(main):001:0> RUBY_VERSION
=> "2.2.3"
irb(main):002:0> require 'resolv'
=> true
irb(main):003:0> Resolv.getaddresses("surkatty.org")
=> ["54.244.9.126"]
irb(main):004:0> Resolv.getaddresses("example.com")
=> ["93.184.216.34"]
irb(main):005:0> Resolv.getaddresses("NX")
=> []
irb(main):006:0> Resolv.getaddresses(""
=> ["54.244.9.126"]
irb(main):007:0> Resolv.getaddresses()
ArgumentError: wrong number of arguments (0 for 1)
from /usr/local/Cellar/ruby/2.2.3/lib/ruby/2.2.0/resolv.rb:48:in `getaddresses'
from (irb):7
from /usr/local/bin/irb:11:in `<main>'
irb(main):008:0

On line 006:0, I would have expected Resolv.getaddresses("") to return either:

1. Raise an ArgumentError or some other indicating an invalid String was passed
2. Return an empty Array

I've also attached a screenshot from my commandline showing the output between IRB sessions as well.

History

#1 - 12/23/2015 01:41 AM - breadtk (Osman Surkatty)
- Assignee set to akr (Akira Tanaka)

Assigning directly to Akira Tanaka, the Resolv maintainer per https://bugs.ruby-lang.org/projects/ruby/wiki/MaintainersStdlib

#2 - 12/23/2015 03:11 AM - nobu (Nobuyoshi Nakada)
- Description updated
- Status changed from Open to Third Party's Issue
- Assignee deleted (akr (Akira Tanaka))

It returned an empty list for an empty name on Darwin 15, but returned a random list on Darwin 14.
Seems a bug of OS X 10.10.

05/10/2020
You may want to request Apple to backport the fix.

#3 - 12/23/2015 03:15 AM - nobu (Nobuyoshi Nakada)

Correction.

The previous result was when VPN is connected, and the answer seemed a list of private addresses over VPN. After disconnecting the VPN, an empty list returned.

I'm not sure if this is your case, however, check your network environment.

Files

dns.png 71.5 KB 12/23/2015  breadtk (Osman Surkatty)