

Ruby trunk - Feature #15628

init_inetsock_internal should fallback to IPv4 if IPv6 is unreachable

02/28/2019 11:51 AM - sonalkr132 (Aditya Prakash)

Status:	Open
Priority:	Normal
Assignee:	
Target version:	
Description	
Hi,	
This is not really bug but more of a missing feature. Let me layout steps to reproduce what I am trying to achieve:	
<ul style="list-style-type: none">• Add local entries for example.com	
<pre>\$ echo " ::1 example.com www.example.com 127.0.0.1 example.com www.example.com" sudo tee --append /etc/hosts</pre>	
<ul style="list-style-type: none">• Add rule to DROP ipv6 packets: <code>sudo iptables -P INPUT DROP</code>• Start a server: <code>ruby -rwebrick -e 'WEBrick::HTTPServer.new(Port: 8000).start'</code>• Making request using Net:HTTP with timeout (Net::OpenTimeout) after after 60 seconds: <code>ruby -rnet/http -e "Net::HTTP.get(URI('http://example.com:8000'))"</code>	
As far as I understand, init_inetsock_internal needs to fallback to ipv4 for Net:HTTP.get to work. IPv6 route being broke is expected and hence, RFC8305 recommends fallback to IPv4.	
Support for IPv6 fallback is spotty across languages and http clients, for example, golang supports it but python doesn't, making request with curl works but wget hangs.	

History

#1 - 02/28/2019 12:11 PM - sonalkr132 (Aditya Prakash)

Related: [rubygems/rubygems#2662](#)

#2 - 03/21/2019 04:24 PM - sonalkr132 (Aditya Prakash)

Net:HTTP with timeout (Net::OpenTimeout) after after 60 seconds

I meant "Net:HTTP will timeout (Net::OpenTimeout) after 60 seconds".

Any suggestion on fixing this would very helpful [download%20\(2\).png](#). So far I have tried using `Socket.tcp(addr.ip_address, serv).close` to preemptively check if resolved addresses are reachable. It works but it is very inefficient.

Besides the brute steps explained above, in the wild, this only affects host which have an IPv6 address but their IPv6 route to our CDN is broken. Personal home networks which generally have only IPv4 connectivity seamlessly use the IPv4 address to start the connection (without the need for a fallback).