

Ruby master - Bug #10747

DNS resolution should fall back to TCP on Errno::EACCES

01/16/2015 07:28 PM - a13m (Andy Grimm)

Status:	Closed		
Priority:	Normal		
Assignee:	akr (Akira Tanaka)		
Target version:			
ruby -v:	2.0.0p353	Backport:	2.0.0: UNKNOWN, 2.1: UNKNOWN, 2.2: UNKNOWN

Description

On some platforms, users may be restricted from global binding to a UDP port, which is necessary for UDP-based DNS lookups. In this case, an exception like the following is currently raised:

```
ruby -r resolv -e 'puts Resolv.getaddress ""
resolv.rb:655:in bind': Permission denied - bind(2) (Errno::EACCES)
resolv.rb:655:in bind_random_port
resolv.rb:791:in initialize'
resolv.rb:560:in new'
resolv.rb:560:in make_udp_requester'
resolv.rb:513:in each_resource'
resolv.rb:406:in each_address'
resolv.rb:115:in block in each_address'
resolv.rb:114:in each'
resolv.rb:114:in each_address'
resolv.rb:92:in getaddress'
resolv.rb:43:in getaddress'
```

This error should be caught, and the resolver should fall back to TCP, as it does in other cases where this is necessary. A possible patch for this (written against 2.0.0p353 in RHEL) is attached.

Ideally, it would also be nice to be able to specify tcp by default when initializing a DNS object on such platforms, to avoid repeated bind attempts which are known to fail, but I am not sure of the best way to introduce such an option.

Associated revisions

Revision f37cc1c7 - 10/21/2019 07:48 PM - jeremyevans (Jeremy Evans)

Fallback to TCP in resolv if UDP bind raises EACCES

Original patch from Andy Grimm.

Fixes [Bug #10747]

History

#1 - 07/08/2019 01:55 AM - jeremyevans0 (Jeremy Evans)

- Assignee set to akr (Akira Tanaka)
- Status changed from Open to Assigned
- File resolv-tcp-fallback-eaccres.patch added

I'm not sure I would consider this a bug, but it seems like a reasonable change. Attached is an updated patch that applies against master.

#2 - 10/21/2019 07:49 PM - jeremyevans (Jeremy Evans)

- Status changed from Assigned to Closed

Applied in changeset [git!f37cc1c719f12d2cad6032aa4e6f4236f0604992](https://gitlab.com/ruby/ruby/commit/f37cc1c719f12d2cad6032aa4e6f4236f0604992).

Fallback to TCP in resolv if UDP bind raises EACCES

Original patch from Andy Grimm.

Fixes [[Bug #10747](#)]

Files

resolver-force-tcp.patch	830 Bytes	01/16/2015	a13m (Andy Grimm)
resolv-tcp-fallback-eacces.patch	1.19 KB	07/08/2019	jeremyevans0 (Jeremy Evans)