

## Ruby master - Bug #10747

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

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

<b>Status:</b>	Assigned		
<b>Priority:</b>	Normal		
<b>Assignee:</b>	akr (Akira Tanaka)		
<b>Target version:</b>			
<b>ruby -v:</b>	2.0.0p353	<b>Backport:</b>	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:inbind_random_port'  
resolv.rb:791:in initialize'  
resolv.rb:560:innew'  
resolv.rb:560:in make_udp_requester'  
resolv.rb:513:ineach_resource'  
resolv.rb:406:in each_address'  
resolv.rb:115:inblock in each_address'  
resolv.rb:114:in each'  
resolv.rb:114:ineach_address'  
resolv.rb:92:in getaddress'  
resolv.rb:43:ingetaddress'
```

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.

#### 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-eaccses.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.

#### Files

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