

Smart Proxy - Bug #13906

IPv6: PTR collision detection NOOP

02/25/2016 12:46 PM - Daniel Helgenberger

Status: New	
Priority: Normal	
Assignee:	
Category: DNS	
Target version:	
Difficulty:	Fixed in Releases:
Triaged:	Found in Releases:
Bugzilla link:	Red Hat JIRA:
Pull request:	

Description

Fix for [#13536](#) / PR379¹ introduced a method to check for ptr collisions. It relies on `Resolv.getnames`² to detect existing records:

Currently, `Resolv.getnames(<reverse resolvable IPv6 address>)` always returns an empty array [], while nslookup resolves the name fine. This might be an upstream issue?

This leads to the following issues for smart-proxy:

- Method always returns no conflict
- Overwriting PTRs fail in #execute
- Collisions fail in #execute, as another PTR exists

Relevant method `ptr_record_conflicts`²

```
# [...]
def resolver
  Resolv::DNS.new(:nameserver => @server)
end

# [...]

# conflict methods return values:
# no conflict: -1; conflict: 1, conflict but record / ip matches: 0
def ptr_record_conflicts(fqdn, ip)
  names = resolver.getnames(ip_addr.to_s)
  return -1 if names.empty?
  return 0 if names.any? {|n| n.to_s.casecmp(fqdn) == 0}
  1
# [...]
```

[1] <https://github.com/theforeman/smart-proxy/pull/379>

[2] https://github.com/theforeman/smart-proxy/blob/develop/modules/dns_common/dns_common.rb#L54

History

#1 - 02/25/2016 06:25 PM - Daniel Helgenberger

FYI: Opened upstream issue, <https://bugs.ruby-lang.org/issues/12112>

#2 - 02/26/2016 09:11 AM - Anonymous

Yeah, it's a bug in resolver. 1.9.3 seems to be fine, as is 2.2.3, everything in between is probably broken.

#3 - 02/26/2016 09:27 AM - Daniel Helgenberger

Right, strangely it breaks and gets fixed in between, see below.

How should we handle this issue?

Working rubies:

- ruby 1.9.3p551 (2014-11-13 revision 48407)
- ruby 1.8.7 (2013-06-27 patchlevel 374)
- ruby 2.1.5p273 (2014-11-13 revision 48405)
- ruby 2.2.4p230 (2015-12-16 revision 53155)

Broken rubies:

- ruby 2.0.0p643 (2015-02-25 revision 49749)
- ruby 2.2.1p85 (2015-02-26 revision 49769)

#4 - 02/26/2016 09:38 AM - Anonymous

IPv6 support isn't there yet. API still fails on creation of a duplicate error (as MS dns catches the error), but returns a different error (we could handle that). Hopefully the issue will get fixed in upstream ruby in the meantime.