

## Smart Proxy - Bug #2720

### smart-proxy DNS doesn't work with multiple DNS servers because of default value for 'dns\_server' option

06/27/2013 04:37 AM - Anonymous

<b>Status:</b> Rejected	
<b>Priority:</b> Normal	
<b>Assignee:</b>	
<b>Category:</b> DNS	
<b>Target version:</b>	
<b>Difficulty:</b>	<b>Fixed in Releases:</b>
<b>Triaged:</b> Yes	<b>Found in Releases:</b>
<b>Bugzilla link:</b> 1220923	<b>Red Hat JIRA:</b>
<b>Pull request:</b>	
<b>Description</b>	
Docs <a href="http://theforeman.org/manuals/1.2/index.html">http://theforeman.org/manuals/1.2/index.html</a> part 4.3.2 - DNS section says this:  The dns_server option is used if the Smart-Proxy is not located on the same physical host as the DNS server. If it is not specified then localhost is presumed.  The problem is that the default value <i>localhost</i> breaks the auto-detection logic inside nsupdate. <b>This prevents smart-proxy from updating records on multiple DNS servers.</b>  See manual page for nsupdate - section INPUT FORMAT:  server {servername} [port]  Sends all dynamic update requests to the name server servername. When no server statement is provided, nsupdate will send updates to the master server of the correct zone. The MNAME field of that zone's SOA record will identify the master server for that zone. port is the port number on servername where the dynamic update requests get sent. If no port number is specified, the default DNS port number of 53 is used.  IMHO there should not be any default value and <i>server</i> statement should be omitted by default.	
<b>Related issues:</b>	
Related to Foreman - Tracker #5409: DNS Proxy Improvements	<b>New</b>
Has duplicate Smart Proxy - Feature #10274: Add option to avoid sending serve...	<b>Duplicate</b> <b>04/27/2015</b>

#### History

##### #1 - 06/27/2013 05:08 AM - Ohad Levy

right.. at the moment a single proxy can manage a single dns server.

##### #2 - 04/23/2014 02:35 PM - Stephen Benjamin

- Related to Tracker #5409: DNS Proxy Improvements added

##### #3 - 05/26/2015 01:43 PM - Bryan Kearney

- Bugzilla link set to 1220923

##### #4 - 05/27/2015 03:24 AM - Dominic Cleal

- Project changed from Foreman to Smart Proxy

- Description updated

- Category changed from DNS to DNS

- Difficulty changed from trivial to easy

I'd suggest this should be configurable, since like Foreman's own option to use local resolvers, having it go directly to the server without relying on external DNS setup may help in some circumstances.

#### #5 - 05/27/2015 03:24 AM - Dominic Cleal

- Has duplicate Feature #10274: Add option to avoid sending server statement to nsupdate added

#### #6 - 04/22/2018 05:41 AM - Sven Lueder

I ran into the same issue documented here.

Letting nsupdate / DNS subsystem sorting out which server to use to update the DNS record seems to be a better approach in a more complex DNS setup.

As I don't wanted to wait until this is fixed, the following code change worked for me in Foreman Release 1.16.1 to suppress the server statement in nsupdate:

```
cd /usr/share/foreman-proxy/modules/dns_nsupdate
```

```
patch -p0 /usr/share/foreman-proxy/modules/dns_nsupdate/dns_nsupdate_main.rb << '@EOF'
```

```
• dada    2018-04-22 07:35:50.140177410 +0200
  --- dns_nsupdate_main.rb    2018-04-03 13:04:42.000000000 +0200  *****
• 39,46 **
  nsupdate_cmd = "#{@nsupdate} #{nsupdate_args}"
  logger.debug "running #{nsupdate_cmd}"
  @om = IO.popen(nsupdate_cmd, "r+")
  !   logger.debug "nsupdate: executed - server #{@server}"
  !   @om.puts "server #{@server}"
  end
```

```
def nsupdate_disconnect
```

```
--- 39,46 ----
```

```
    nsupdate_cmd = "#{@nsupdate} #{nsupdate_args}"
    logger.debug "running #{nsupdate_cmd}"
    @om = IO.popen(nsupdate_cmd, "r+")
  !   # logger.debug "nsupdate: executed - server #{@server}"
  !   # @om.puts "server #{@server}"
  end
```

```
def nsupdate_disconnect
```

```
@EOF
```

#### #7 - 04/22/2018 05:44 AM - Sven Lueder

seems to me that i need to get used to the automated formatting applied ...  
sorry for that

here the same snippet as above suitable for copy / paste:

```
cd /usr/share/foreman-proxy/modules/dns_nsupdate
patch -p0 /usr/share/foreman-proxy/modules/dns_nsupdate/dns_nsupdate_main.rb << '@EOF'
```

```
*** dada    2018-04-22 07:35:50.140177410 +0200
--- dns_nsupdate_main.rb    2018-04-03 13:04:42.000000000 +0200
*****
```

```
*** 39,46 ****
    nsupdate_cmd = "#{@nsupdate} #{nsupdate_args}"
    logger.debug "running #{nsupdate_cmd}"
    @om = IO.popen(nsupdate_cmd, "r+")
  !   logger.debug "nsupdate: executed - server #{@server}"
  !   @om.puts "server #{@server}"
  end
```

```
def nsupdate_disconnect
```

```
--- 39,46 ----
```

```
    nsupdate_cmd = "#{@nsupdate} #{nsupdate_args}"
    logger.debug "running #{nsupdate_cmd}"
    @om = IO.popen(nsupdate_cmd, "r+")
  !   # logger.debug "nsupdate: executed - server #{@server}"
  !   # @om.puts "server #{@server}"
  end
```

```
def nsupdate_disconnect
```

```
@EOF
```

#### #8 - 08/08/2018 09:48 AM - Lukas Zapletal

Sven, thanks for the patch. Are you willing to file PR into <https://github.com/theforeman/smart-proxy/pulls> so we can review? It will involve writing a

test.

**#9 - 08/09/2018 01:37 PM - The Foreman Bot**

- Status changed from New to Ready For Testing
- Assignee set to Lukas Zapletal
- Pull request <https://github.com/theforeman/smart-proxy/pull/602> added

**#10 - 03/04/2020 02:41 PM - Lukas Zapletal**

- Status changed from Ready For Testing to New
- Pull request deleted (<https://github.com/theforeman/smart-proxy/pull/602>)

There are some concerns about setting validations, I don't have time for this.

**#11 - 03/05/2020 12:58 PM - Ewoud Kohl van Wijngaarden**

- Assignee deleted (Lukas Zapletal)
- Difficulty deleted (easy)

This isn't easy since the conflict detection also depends on a DNS server. In case a recursor is used, TTLs may get in the way and results become unpredictable.

**#12 - 04/01/2020 12:15 PM - Lukas Zapletal**

- Triaged changed from No to Yes
- Status changed from New to Rejected

Ewoud comment:

Note that conflict detection (which depends on `dns\_server` for various providers) would be very unreliable with that patch. dns\_dnscmd is one of those. The implication is that you would have a recursor that looks at DNS records. Since a recursor will cache records, conflict detection will look at old records. TTLs of a day are not that uncommon so errors can show up for problems that are already solved.

You also have no control on the Foreman side where a domain ends up. I'd recommend multiple smart proxies so in Foreman it's clear exactly where a domain lives.

<https://community.theforeman.org/t/multiple-dns-servers-with-dnscmd-smart-proxy-provider/18010>