

# Antwort: Re: timeout by DNS? [Virus checked]

*Source:* <http://unix.derkeiler.com/Mailing-Lists/AIX-L/2004-11/0269.html>

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*fmu\_at\_OERAG.DE*

*Date:* 11/23/04

Date: Tue, 23 Nov 2004 13:34:47 +0100  
To: aix-l@Princeton.EDU

Hi Vesna,

thanks for your answer.

Your explanation is good and something about this I found in the Internet. Which I do not understand, if the first entry is wrong or the first nameserver was crashed, the second entry should function after 5 seconds. But why functioned that not and it does run all cycles through (75s).

Best regards,  
Frank Mueller

Vesna Vranesic  
<vesna.vranesic@R An: aix-l@Princeton.EDU  
ZB.AT> Kopie:  
Gesendet von: IBM Thema: Antwort: Re: timeout by DNS? [Virus checked]  
AIX Discussion  
List  
<aix-l@Princeton.  
EDU>

23.11.2004 13:17  
Bitte antworten  
an IBM AIX  
Discussion List

The quotation I have found few years ago about this issue:

"On AIX, a DNS query will wait a total of 75 seconds before

failing over to the second nameserver entry in the resolv.conf.  
The 75 sec timeout period comes from two values RES\_RETRY and RES\_TIMEOUT. The way it works is the dns client will try to contact the dns server, then if it doesn't get an answer back it will wait 5 seconds and try again, then it will wait 10 secs and try again, 20 sec and try again, 40 secs and try again.

.  
 $5 + 10 + 20 + 40 = 75$  seconds

If you want to change these on the dns client do the following:

```
.  
# export RES_RETRY=value  
# export RES_TIMEOUT=value  
.
```

The timeout is defined by two values :  
RES\_TIMEOUT (default 5 sec)  
RES\_RETRY (default 4 times)  
Each retry the initial timeout value is multiplied by 2

```
.  
Example :  
5 + 10 + 20 + 40 = 75 <---- default timeout  
.
```

The Cust can export other values to change this behaviour

```
.  
Example :  
export RES_TIMEOUT=10  
export RES_RETRY=2  
.
```

```
10 + 20 = 30 seconds timeout  
.
```

In order for these to remain in effect after a reboot you need to vi

/etc/environment and add these in the file."

I am not sure if something has changed recently (read: for AIX5L).

Ciao  
Vesna

```
|-----+----->  
||  
|| hdkutz@HDKUTZ.DE |  
||  
|| Gesendet von: |  
|| aix-l@Princeton.EDU |  
|| 23.11.2004 12:48 |  
|| Bitte antworten an |  
|| aix-l |  
||  
|-----+----->  
>----->
```

```
|  
|  
|An: aix-l@Princeton.EDU  
|  
|Kopie:  
|  
|Blindkopie:  
|
```

[Thema: Re: timeout by DNS? [Virus checked]

|  
>-----

On Tue, Nov 23, 2004 at 12:25:38PM +0100, Holger.VanKoll@SWISSCOM.COM wrote:

> > Now I change the first entrie to a wrong IP-address for the first  
> nameserver, the nslookup needs a long time to go to the second  
> nameserver.  
> then, dont do that ;-)  
>  
> > Now my question is, what is the parameter to tune the timeout for DNS?  
>  
> well, the timeouts for nslookup , host, dig are different – so it looks  
> like its up to the application  
> nslookup has (afair) a –timeout= option  
>  
> I doubt there is a system-wide parameter that you can tune  
>  
> if dns-response time is critical, run a local caching-only nameserver  
Hmm. Why isn't "options rotate" like in Linux or Solaris implemented in  
AIX?

Recently we had a problem with our Production Nameserver. All Solaris and  
Linux

Boxes went fine, only AIX got into trouble resolving Names from the  
secondary

Nameserver, waiting for timeout of the primary DNS.

Cheers,  
ku

--

C-3PO:

Sir, the possibility of successfully navigating  
an asteroid field is approximately 3,720 to 1!

Han Solo:

Never tell me the odds!

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