

FreeNAS - Bug #40512

Put threshold of 8 sequential failures for NTP connection alert

08/02/2018 08:55 AM - Greg Stengel

Status: Done	
Priority: No priority	
Assignee: Timur Bakeyev	
Category: Services	
Target version: 11.2-BETA3	
Seen in: 11.2-BETA2	Needs Merging: No
Severity: Low	Needs Automation: No
Reason for Closing:	Support Suite Ticket: n/a
Reason for Blocked:	Hardware Configuration:
Needs QA: No	ChangeLog Required: No
Needs Doc: No	
Description After upgrading to FreeNAS-11.2-BETA2 I am getting a constant alert about NTP status. It's very odd as the IP mentioned 23.239.26.89 resolves back hadb1.smatwebdesign.com? Looks like some web hosting company and I am not sure how it's relative to NTP or FreeNAS.	
Related issues: Related to FreeNAS - Bug #40432: [BETA2] Email alerts now coming in for "*" NT... Closed	

Associated revisions

Revision fc5bab25 - 08/17/2018 11:00 AM - Timur Bakeyev

tk-40512: Put threshold of 8 sequential failures for NTP connection alert. (#1698)

- Put threshold of 8 sequential failures for NTP connection alert.

Ticket: #40512

History

#1 - 08/02/2018 08:56 AM - Greg Stengel

- File *debug-freenas-20180802155603.tgz* added
- Private changed from No to Yes

#2 - 08/02/2018 09:27 AM - Dru Lavigne

- Category changed from Services to Middleware
- Assignee changed from Release Council to William Grzybowski

#4 - 08/02/2018 09:37 AM - William Grzybowski

- Assignee changed from William Grzybowski to Timur Bakeyev
- Target version changed from Backlog to 11.2-BETA3

Timur, seems like NTP is very flaky. Do we really need to alert unless something terrible is going on?

#5 - 08/02/2018 09:46 AM - Dru Lavigne

- Related to Bug #40432: [BETA2] Email alerts now coming in for "" NTP status: 2 out of 8 probes failed" added

#6 - 08/02/2018 01:55 PM - Timur Bakeyev

- Status changed from Unscreened to Screened

William Grzybowski wrote:

Timur, seems like NTP is very flaky. Do we really need to alert unless something terrible is going on?

That's a good question, in ideal world those errors shouldn't happen, but unless this is a persistent issue it possibly can be ignored.

#7 - 08/02/2018 02:15 PM - Timur Bakeyev

- Severity changed from New to Low

- Needs QA changed from Yes to No

- Needs Doc changed from Yes to No

- Needs Merging changed from Yes to No

Hi, Greg!

By default FreeNAS picks up 2(3) random remote NTP servers which are provided by 0.freebsd.pool.ntp.org alias. This list is build on pretty voluntary basis and basically anyone who participates in the effort to provide free NTP sources can join(if their server qualifies).

So, one of that participants is 23.239.26.89 server and it was selected by NTP as best fitting one out of 3 picked ones:

```

+-----+
+                               ntpq -c rv @1533225343                               +
+-----+
associd=0 status=0615 leap_none, sync_ntp, 1 event, clock_sync,
version="ntpd 4.2.8p11-a (1)", processor="amd64",
system="FreeBSD/11.2-STABLE", leap=00, stratum=3, precision=-23,
rootdelay=84.865, rootdisp=48.316, refid=23.239.26.89,
reftime=df0da6c2.25e8bb8a Thu, Aug 2 2018 11:50:26.148,
clock=df0da7ff.79387b47 Thu, Aug 2 2018 11:55:43.473, peer=4182, tc=9,
mintc=3, offset=1.499756, frequency=40.714, sys_jitter=5.553191,
clk_jitter=0.339, clk_wander=0.013

+-----+
+                               ntpq -pwn @1533225343                               +
+-----+
  remote           refid          st t when poll reach  delay  offset  jitter
=====
+12.167.151.2      198.148.79.210    3 u  47  512  377   42.398    2.739    0.901
+38.229.71.1       204.9.54.119     2 u  140 512  377   56.140   -1.840    1.135
*23.239.26.89     216.218.254.202  2 u  317 512  377   47.557    4.016    0.314

```

In general, you can reshuffle the list of the servers by just restarting NTPD:

```
# service ntpd restart
```

But what exact warning message do you get? It could be that your internet connection is actually flaky and NTP server isn't reachable.

Can you quote that message?

#8 - 08/02/2018 03:22 PM - William Grzybowski

Timur Bakeyev wrote:

William Grzybowski wrote:

Timur, seems like NTP is very flaky. Do we really need to alert unless something terrible is going on?

That's a good question, in ideal world those errors shouldn't happen, but unless this is a persistent issue it possibly can be ignored.

Several users are getting these errors, telling them to ignore is not going to fly.

We need to figure out a way to alert only when absolutely necessary (perhaps when the issues have persisted for a good amount of time?)

#9 - 08/02/2018 03:28 PM - Timur Bakeyev

William Grzybowski wrote:

Several users are getting these errors, telling them to ignore is not going to fly.

We need to figure out a way to alert only when absolutely necessary (perhaps when the issues have persisted for a good amount of time?)

I can't argue with you on that, the question is how to calibrate those warnings. I guess, it would be nice to collect complains of the users and draw a line where flaking service starts to become a problem.

#10 - 08/02/2018 04:57 PM - Greg Stengel

I get a couple different related messages. Here are some specific examples

New alerts:

- NTP status: No response received from 96.126.105.86.

Alerts:

- NTP status: No response received from 96.126.105.86.

New alerts:

- NTP status: 6 out of 8 probes failed

Alerts:

- NTP status: 6 out of 8 probes failed

#11 - 08/02/2018 04:58 PM - Greg Stengel

Also I can confirm it's not caused by a flaky internet connection. I work on the same internet connection and it's been up all day. Let me know if there is any other details I can provide.

#12 - 08/02/2018 05:46 PM - Timur Bakeyev

Greg, thanks for the update.

I guess this check is too sensitive for the real life Internet. I'll disable it in the next version of the FN update.

How frequently do you get those alerts? If you'd restart ntpd - would anything change in regards of the alerts, as, probably, another remote peer will be picked up for synchronization. It could be that it's only your connectivity with the 96.126.105.86 is flaky or, that there is some minor, but notable UDP packet loss in your network - that would stay unnoticeable by TCP connections(like ssh), but may affect UDP protocols, like ntp. Another good example of UDP protocol is DNS - does your FN box always capable to resolve hostnames from the first attempt?

#13 - 08/02/2018 06:46 PM - John Hixson

As stated in the other NTP alert ticket, how about we only alert if drifting more than 5 minutes? That's the standard for Kerberos. Even at that point, we should have a backoff algorithm for the alerts to we aren't spamming.

#14 - 08/03/2018 06:25 AM - Greg Stengel

I would say they average every 30 minutes. It's not consistent, but often. Also, I have received alerts regarding 4 endpoints so far; 45.56.118.161, 45.79.111.167, 96.126.105.86, 23.239.26.89. I restarted ntpd yesterday after your previous suggestion and the alerts continue. I will run some tests for DNS resolution today and update later.

#15 - 08/03/2018 07:06 PM - Greg Stengel

against a list of 1757 random domains, those that had proper DNS resolved instantly.

#16 - 08/09/2018 11:03 AM - Timur Bakeyev

Hi, Greg!

I couldn't find any UDP issues in the output of netstat -s -p UDP in your debug log. Well, you can check yourself again, if there is anything wrong there now.

I don't see what else immediately can be wrong with NTP traffic, so I think I'll just put higher threshold for the alerts and only long lasting connectivity

issues will be reported.

#17 - 08/09/2018 11:03 AM - Timur Bakeyev

- File deleted (*debug-freenas-20180802155603.txz*)

#18 - 08/09/2018 11:04 AM - Timur Bakeyev

- Status changed from *Screened* to *In Progress*

- Private changed from *Yes* to *No*

#19 - 08/13/2018 10:12 AM - Dru Lavigne

- Category changed from *Middleware* to *Services*

#20 - 08/16/2018 02:23 PM - Timur Bakeyev

Master PR: <https://github.com/freenas/freenas/pull/1698>

#21 - 08/17/2018 12:33 AM - Dru Lavigne

- Subject changed from *NTP status: No response received from 23.239.26.89 | FreeNAS-11.2-BETA2* to *Put threshold of 8 sequential failures for NTP connection alert*

- Needs QA changed from *No* to *Yes*

- Needs Merging changed from *No* to *Yes*

#22 - 08/17/2018 11:00 AM - Bug Clerk

- Status changed from *In Progress* to *Ready for Testing*

PR: <https://github.com/freenas/freenas/pull/1698>

#23 - 08/17/2018 11:12 AM - Timur Bakeyev

- Needs Merging changed from *Yes* to *No*

#24 - 09/05/2018 11:53 AM - Bonnie Follweiler

- Status changed from *Ready for Testing* to *Passed Testing*

Test Passed in FreeNAS-11.2-MASTER-201809050856

#25 - 09/05/2018 12:51 PM - Dru Lavigne

- Status changed from *Passed Testing* to *Done*

- Needs QA changed from *Yes* to *No*