

pfSense - Bug #4081

Apinger reporting incorrect latency

12/07/2014 11:02 AM - Denny Page

| | | | |
|--------------------------|--------------------|-------------------------------|------------|
| Status: | Resolved | Start date: | 12/07/2014 |
| Priority: | Normal | Due date: | |
| Assignee: | | % Done: | 0% |
| Category: | Gateway Monitoring | Estimated time: | 0.00 hour |
| Target version: | 2.3 | Affected Architecture: | All |
| Affected Version: | All | | |

Description

If a gateway has an explicit monitor address, apinger will stop reporting latency to the monitor address and switch to reporting latency for the gateway address. Very obvious if the gateway address is local (~ 1ms) and the monitor address is across a remote link (~10ms). Once the switch occurs, apinger appears to remain stuck reporting the lower value.

It's notable that (hours) after the event, the pings are going to the correct (monitor) address even though the latency being reported corresponds to the local gateway address.

It's unclear what the trigger for this is. I haven't caught the event live yet. I have a tcpdump running in hopes of catching the event live.

History

#1 - 12/07/2014 12:00 PM - Michael Kellogg

I have a bare metal box that I believe this or something related is happening chris has access info if any of the other devs want to look at it

#2 - 12/08/2014 10:28 AM - Chris Buechler

- Category set to Gateway Monitoring

- Status changed from New to Confirmed

it's not reporting latency to the gateway, its calculations become wrong under some circumstance.

#3 - 12/08/2014 02:29 PM - Michael Kellogg

also affects rrd graph at same time

#4 - 01/26/2015 06:19 PM - Chris Buechler

- Target version set to 2.2.1

#5 - 02/25/2015 06:03 PM - Michael Kellogg

with this about 20% of the time causes a mail storm makes the box inaccessible from webgui a reset of web configurator doesn't help it seems to require a reboot to recover

#6 - 02/25/2015 06:08 PM - Michael Kellogg

could this issue be aggravated by using google dns as monitor addresses as they are anycast?

#7 - 03/02/2015 03:34 PM - Stuart Wyatt

- File pfsense 4081.jpg added

- File pfsense 4081 fix.jpg added

I had this problem on a clean plain install of 2.2 using a cable modem DHCP WAN with no explicitly set or override of the gateway monitor.

When it occurs, the RTT value drops to about 10-20% of the actual value but continues to follow the actual value proportionally.

I was able to "fix" it by rebooting the cable modem or disconnecting and reconnecting the WAN interface cable. I couldn't correlate anything with the trigger.

I've attached RDD graphs of it occurring and the "fix"

#8 - 03/04/2015 02:58 PM - Chris Buechler

- Target version changed from 2.2.1 to 2.2.2

#9 - 04/02/2015 04:36 PM - Chris Buechler

- Target version changed from 2.2.2 to 2.2.3

#10 - 04/24/2015 08:54 PM - Heiler Bemerguy

I have this bug here. It screws up our Multi-WAN setup. Ideally we should use losses/highping to switch gateways, but as these data are almost always wrong/surreal, we disabled it. The only temporary fix I've seen is restarting apinger service every 5-10 minutes :/

#11 - 04/24/2015 08:56 PM - Heiler Bemerguy

I must add that this always happened, with 2.1.4, 2.1.5, 2.2.0, 2.2.1 and 2.2.2. In a XEN or VMWare environment.

#12 - 04/24/2015 09:05 PM - Stuart Wyatt

I never saw this happen on several 2.1.5 installs but it happened on every (3) 2.2.0 install I tried.

I'll have a test machine I can connect to a cable modem next week in hopes to track this problem down. I've been reviewing the code and have some things to look for when it gets into this state. I need reliable latency and loss tracking so this is a high priority bug for me.

#13 - 04/27/2015 11:32 AM - Heiler Bemerguy

Sending ping #1584 to GWPDP (200.160.6.214)
Recently lost packets: 0
Sending ping #3607 to GWEBT (200.230.251.210)
Recently lost packets: 0
Polling, timeout: 0.999s
#3607 from GWEBT delay: 52.327ms/43.812ms/496.876ms received = 3360
(avg: 49.688ms)
(avg. loss: 0.0%)
Polling, timeout: 0.947s
#1584 from GWPDP delay: 67.941ms/65.886ms/658.732ms received = 1577
(avg: 65.873ms)
(avg. loss: 0.0%)
Polling, timeout: 0.931s
Sending ping #1585 to GWPDP (200.160.6.214)
Recently lost packets: 0
Sending ping #3608 to GWEBT (200.230.251.210)
Recently lost packets:* 1*

Why did it increment GWEBT loss from 0 to 1 if it received the ping successfully ?

#14 - 06/01/2015 10:40 PM - Chris Buechler

- Status changed from Confirmed to Needs Patch
- Target version deleted (2.2.3)

apinger is being replaced in 2.3, which will resolve outstanding issues here.

#15 - 11/11/2015 12:57 PM - Michael Kellogg

this does not show up to be tracked for 2.3

#16 - 11/20/2015 04:43 AM - George Koflis

Only workaround is cron job every 3-5 minutes or so when is apinger update version gonna be released any idea?

#17 - 12/06/2015 03:00 PM - Jeppe Oland

For me, apinger suddenly goes from 5ms to 50ms.
Restarting it recovers.

#18 - 12/15/2015 05:56 PM - Chris Buechler

- Status changed from Needs Patch to Resolved
- Target version set to 2.3
- Affected Version changed from 2.2 to All

fixed in 2.3 by replacing apinger

#19 - 12/15/2015 10:49 PM - Denny Page

Thanks Chris!

#20 - 12/16/2015 01:05 AM - Chris Buechler

Thank you, Denny. Appreciate the help getting rid of our apinger woes. I've been through a variety of test scenarios that used to make apinger lose its mind and fail basic math, and have yet to find any inaccuracies in dpinger output.

Files

| | | | |
|----------------------|---------|------------|--------------|
| pfsense 4081.jpg | 68.6 KB | 03/02/2015 | Stuart Wyatt |
| pfsense 4081 fix.jpg | 69 KB | 03/02/2015 | Stuart Wyatt |