

pfSense - Feature #8794

NTP authentication

08/17/2018 01:43 PM - Tod L

Status:	New	Start date:	08/17/2018
Priority:	Normal	Due date:	
Assignee:	Tod L	% Done:	50%
Category:	NTPD	Estimated time:	0.00 hour
Target version:	CE-Next	Release Notes:	Default
Plus Target Version:			
Description			
NIST 800.53, specifically CM-6, requires network devices sync their time source using authenticated NTP. I'd like to request the NTP client in pfsense have an option to use authentication with NIST time servers. Cisco routers have this capability built in.			

Associated revisions

Revision 9108d083 - 10/08/2020 08:26 AM - Viktor Gurov

NTP server authentication. Issue #8794

History

#1 - 08/14/2019 11:53 AM - Jim Pingle

- Category set to NTPD

#2 - 03/05/2020 05:47 AM - Viktor Gurov

Currently supported NTP auth hashes by vendors:

Juniper - MD5, SHA1, SHA256

Huawei - MD5, SHA256

Palo Alto - MD5, SHA1

Cisco, Avaya and most other vendors - MD5 only

#3 - 10/03/2020 08:23 AM - Viktor Gurov

Server side authentication support:

<https://github.com/pfsense/pfsense/pull/4472>

#4 - 10/05/2020 08:10 AM - Jim Pingle

- Status changed from New to Pull Request Review

- Target version set to 2.5.0

#5 - 10/12/2020 07:05 AM - Renato Botelho

- Status changed from Pull Request Review to Feedback

- Assignee set to Renato Botelho

- % Done changed from 0 to 100

PR has been merged. Thanks!

#6 - 10/16/2020 09:02 AM - Steve Beaver

- Assignee changed from Renato Botelho to Tod L

#7 - 11/28/2020 10:18 AM - Viktor Gurov

- Status changed from Feedback to New
- Target version changed from 2.5.0 to CE-Next

after configuring ntpd authentication on Debian peer I can see packets with MAC:

```
Network Time Protocol (NTP Version 4, server)
  Flags: 0x24, Leap Indicator: no warning, Version number: NTP Version 4, Mode: server
  Peer Clock Stratum: secondary reference (3)
  Peer Polling Interval: 6 (64 sec)
  Peer Clock Precision: 0.000015 sec
  Root Delay: 0.0244598388671875 seconds
  Root Dispersion: 0.07177734375 seconds
  Reference ID: 193.182.111.13
  Reference Timestamp: Nov 28, 2020 16:00:20.461789665 UTC
  Origin Timestamp: Nov 28, 2020 16:09:03.511942520 UTC
  Receive Timestamp: Nov 28, 2020 16:09:03.515572186 UTC
  Transmit Timestamp: Nov 28, 2020 16:09:03.515697472 UTC
  Key ID: 00000001
  Message Authentication Code: 5e194bd30f46bb22789f80c8e8964ae7
```

linux peer 'ntpq -c as' output:

```
ind  assid  status  conf  reach  auth  condition  last_event  cnt
=====
  1  59188  8811   yes  none  none    reject     mobilize    1
  2  59189  f31a   yes   yes   ok      outlier    sys_peer    1
```

pfSense 2.5.0.a.20201127.1850

pfSense NTP client still doesn't have authentication support, so I set the target version to 2.5.next

#8 - 04/14/2021 01:49 PM - LamaZ .

Folks, I made a patch to the function `system_ntp_configure()` in the file `/etc/inc/system.inc` to get this working. Tested on 21.02.2.

Patch pasted here:

<https://forum.netgate.com/post/977899>, see below auth field indicating *ok* on the ntp client on pfSense.

```
[21.02.2-RELEASE][admin@your-sweet-pfsense-server-name]/root: ntpq -pc as
  remote          refid          st t when poll reach  delay  offset jitter
=====
*ntp-g.nist.gov  .NIST.          1 u   7   64  377  10.865 -0.019  0.738

ind assid status  conf reach auth condition  last_event cnt
=====
  1 64816  f61a  yes  yes  ok  sys.peer  sys_peer  1
```

-LamaZ

#9 - 06/07/2021 06:59 AM - Steve Wheeler

- % Done changed from 100 to 50

The ntp client auth is yet to be implemented.