

pfSense - Bug #2835

fadvice memory leak in FreeBSD 8.3-RELEASE

02/22/2013 10:48 AM - Phillip Davis

Status:	Resolved	Start date:	02/22/2013
Priority:	Normal	Due date:	
Assignee:		% Done:	100%
Category:	Operating System	Estimated time:	0.00 hour
Target version:	2.1	Affected Architecture:	
Affected Version:	2.1		

Description

From pfSense forum <http://forum.pfsense.org/index.php/topic.59249.0.html> :

Apparently there is a memory leak in the posix_fadvise function in FreeBSD 8.3-RELEASE which has been fixed in the 8-STABLE mainline. My nanoBSD system has leaked 5MB in a couple of days of uptime:

```
vmstat -m | grep fadvise
```

```
fadvise 164447 5139K - 164447 32
```

That would become significant when a 256MB nanoBSD system is up for a month. After rebooting, the fadvise usage starts back at 1K and slowly increases.

FreeBSD 8.3 release notes have references to posix_fadvise - <http://www.freebsd.org/releases/8.3R/relnotes-detailed.html>

This FreeBSD forum thread has some symptoms etc - <http://forums.freebsd.org/showthread.php?p=192718>

and this thread indicates that RRDtool uses posix_fadvise, running up kernel memory leaks -

<http://oss.oetiker.ch/rrdtool/forum.en.html#nabble-td7580539>

and the fix (claimed) is here - <http://svnweb.freebsd.org/base?view=revision&revision=234661>

Can someone see if this is a good fix, is worth doing and is possible to patch into the pfSense FreeBSD 8.3?

I am happy to pre-test a build with this in it, if needed.

History

#1 - 02/24/2013 09:00 AM - Renato Botelho

- Status changed from New to Feedback

- % Done changed from 0 to 100

Applied in changeset pfsense-tools:commit:548949d8726b5660d288336e8679e48f3b8cd2ff.

#2 - 02/24/2013 10:11 PM - Phillip Davis

From a system before upgrade:

```
[2.1-BETA1]/root(1): uptime
```

```
9:02AM up 2 days, 16:19, 2 users, load averages: 1.56, 1.87, 1.32
```

```
[2.1-BETA1]/root(1):vmstat -m | grep fadvise
```

```
fadvise 56389 1763K - 56389 32
```

and demonstrating that the leak can be seen straight after a reboot:

```
[2.1-BETA1]/root(2): uptime
```

```
9:29AM up 7 mins, 2 users, load averages: 0.30, 1.22, 0.86
```

```
[2.1-BETA1]/root(3): vmstat -m | grep fadvise
```

```
fadvise 118 4K - 118 32
```

After upgrading to Sun Feb 24 15:44:36 EST 2013:

```
[2.1-BETA1]/root(1): uptime
```

```
9:52AM up 1:28, 3 users, load averages: 0.24, 0.59, 0.68
```

```
[2.1-BETA1]/root(2): vmstat -m | grep fadvise
```

```
fadvise 0 0K - 2008 32
```

Leak is plugged! Thanks for the quick action.

#3 - 02/24/2013 11:56 PM - Chris Buechler

- *Status changed from Feedback to Resolved*