pfSense - Bug #10310

Systems with low RAM and several packages may temporarily fail to load large tables after an upgrade

03/02/2020 02:47 PM - Jim Pingle

Status:	New	**Start date:**	03/02/2020
Priority:	Normal	**Due date:**	
Assignee:		**% Done:**	0%
Category:	Upgrade	**Estimated time:**	0.00 hour
Target version:	Future		
Affected Version:	2.4.5	**Affected Architecture:**	All

Description

Systems with lower amounts of RAM and with many packages installed may temporarily fail to load tables at boot time only on the first boot after an upgrade. The problem happens somewhere under 1GB, definitely happens at 512MB. There is no known specific number of packages or combination of packages that may bring out this condition.

At boot, the log will contain an error and a notice will appear on the dashboard:

```
New alert found: There were error(s) loading the rules: /tmp/rules.debug:23: cannot define table b
ogonsv6: Cannot allocate memory - The line in question reads [23]: table <bogonsv6> persist file "
/etc/bogonsv6"
```

Note that in this specific case the condition is only temporary from the system being under heavier memory burden than usual during the upgrade process. By the time a user can get into a shell to check, the tables have successfully been loaded.

The easiest workaround is to clear the error since it is not an ongoing condition. Though rebooting the firewall will also clear the error and the error will not recur, it is not necessary.

To avoid the error, uninstall packages before the upgrade or add more RAM to the system.

This is known to affect 2.4.5 but since it's non-fatal and easily avoided, this is largely for documentation purposes unless a solution presents itself.

Also note that this is NOT due to an undersized max table entries value or missing net.pf.request_maxcount (#10254), as on 2.4.5 and 2.5.0 the error message will be "too many elements" when the limits are exceeded and not "Cannot allocate memory" as is observed in this case.

History

#1 - 03/03/2020 07:55 AM - Jim Pingle

- Description updated