

pfSense - Bug #3932

Captive portal with greater than 9000 permanent MAC addresses causes timeout in loading CP

10/13/2014 12:09 PM - Jeremy Porter

Status:	Closed	Start date:	10/13/2014
Priority:	Normal	Due date:	01/05/2015
Assignee:	Renato Botelho	% Done:	0%
Category:	Captive Portal	Estimated time:	0.00 hour
Target version:			
Affected Version:	All	Affected Architecture:	All

Description

When using captive portal, with all users become permanently learned after enough users have authenticated the system will run out of memory attempting to parse the config.xml.

Attempting to make changes to the config becomes impossible as the php process will crash.

Storing mac addresses in a sqlite database, will prevent the parsing from running out of memory.

Associated revisions

Revision 621fed0e - 10/17/2014 06:33 PM - Ermal Luçi

Ticket #3932 For more than 100 entries create pipes in line with the rules file to speedup the process

Revision ab8d50ac - 11/18/2014 11:33 PM - Chris Buechler

Shorten up the MAC pass-through descr. It was redundant, and for those with huge numbers of auto-added MAC passthrough entries, it adds up to a significant amount of config space (adding to delays when launching CP). helps Ticket #3932

Revision 64ed3e60 - 01/12/2015 02:27 AM - Ermal Luçi

Fix inherent issues with isset and empty values set as true by our parser. This made the piep configuration to be wrong at least for passthrough entries. Ticket #3932

Revision 384deecb - 01/12/2015 02:27 AM - Ermal Luçi

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Revision 7077addc - 01/12/2015 03:38 AM - Ermal Luçi

Ticket #3932 Use array_map to get more parallelism when there are many entries. This makes it not reach the execution timeout with large entries.

Revision aa685f7a - 01/12/2015 03:38 AM - Ermal Luçi

Ticket #3932 Use array_map to get more parallelism when there are many entries. This makes it not reach the execution timeout with large entries.

Revision 41196b69 - 01/12/2015 01:57 PM - Ermal Luçi

Split the work into different jobs called through fgcicli. Helps Ticket #3932

History

#1 - 10/13/2014 09:50 PM - Chris Buechler

- Target version changed from 2.2 to 2.3

- Affected Version changed from 2.1.x to All

How big are the resulting configs there? I'm not running PHP out of memory after throwing 9000 randomly-generated MACs in the passthrough list.

Though the config is pretty bare outside the MAC list, it's a total of a bit under 500 KB config file. My <descr> fields are all blank, that might be enough to push it over the edge.

During boot, it sits there during boot at "Starting captive portal..." for roughly 15 minutes on an older i7 CPU VM.

Definitely more than we're going to get into for 2.2 given it's an extraordinarily rare edge case, will take some effort to fix, and we're too short on time.

I only tried on 2.2, haven't done any testing on previous releases.

#2 - 10/15/2014 11:51 AM - Jim Thompson

- Assignee set to Ermal Luçi
- Priority changed from Low to Normal
- Target version changed from 2.3 to 2.2

Ermal suggests that if /cf/conf/use_xmlreader exists, that a faster parser will be used in 2.2.

Please re-test. Ermal will also look at speeding up loading of passthrough MACs.

Target set back to 2.2

#3 - 10/17/2014 06:28 PM - Ermal Luçi

The loading should be faster.

#4 - 11/19/2014 09:59 PM - Chris Buechler

- Status changed from New to Confirmed
- Affected Documentation 0 added

I committed a change last night to shorten the <descr> text, which helps slightly, but still nothing works at 9000 MAC passthrough entries.

With an updated test case where the <descr> is filled out with the same text used on a real system with auto-add MAC passthrough, this fails pretty miserably. That takes the config up from about 500K to just over 1 MB. CP fails to start, after waiting for 15 minutes at "Starting zone" and failing with:

```
Maximum execution time of 900 seconds exceeded in /etc/inc/captiveportal.inc on line 1448
```

It fails the same way whether or not use_xmlreader is set.

Everything other than CP continues to work very well, and even management of CP works well. The huge table of MACs on services_captiveportal_mac.php fully loads in under 10 seconds.

Given time constraints on 2.2, and the high risk of introducing breakage when doing major performance improvements, we're not going to be able to make vast improvements here in 2.2. A work around for the one system where this is an issue is probably our best near-term bet. Adding a cron job to trim the list of the oldest entries and keep it to X length should work around.

I'll discuss options here with Ermal.

#5 - 12/10/2014 10:58 PM - Jim Thompson

Could we try what Jeremy asked for?

#6 - 12/31/2014 02:12 AM - Chris Buechler

- Subject changed from *Captive portal with greater than 9000 permanent MAC addresses causes out of memory when loading config.xml to Captive portal with greater than 9000 permanent MAC addresses causes timeout in loading CP*

- Target version changed from 2.2 to 2.2.1

2.2 doesn't run out of memory doing this, so the problem as it existed in earlier versions is gone (probably with the switch to php-fpm). It's just so slow in some part of the processing that it hits the 15 minute time limit on execution. It's not in the config parsing portion though, it'd be more or less equally slow with any back end. We'll review in more detail post-2.2, in the mean time we can get them a script to trim the list.

#7 - 12/31/2014 11:31 AM - Jim Thompson

- Due date set to 01/05/2015

- Target version changed from 2.2.1 to 2.2

Target version set back to 2.2.

The issue is that it's slow.

I made an assignment yesterday. I'm restoring it now.

#8 - 01/09/2015 08:27 PM - Jim Thompson

- Target version changed from 2.2 to 2.2.1

#9 - 01/12/2015 02:33 AM - Ermal Luçi

- Status changed from *Confirmed to Feedback*

I pushed some fixes related to this that impacted even 2.2
Normally on a capable machine for this it should be ok.

The only problem might be the max execution timeout which can be controlled differently.

#10 - 01/12/2015 05:23 AM - Ermal Luçi

- Target version changed from 2.2.1 to 2.2

This should be resolved properly now.

#11 - 01/13/2015 12:09 AM - Jim Thompson

- Target version changed from 2.2 to 2.2.1

#12 - 01/28/2015 10:58 PM - Chris Buechler

- Target version changed from 2.2.1 to 2.2.2

#13 - 04/02/2015 04:36 PM - Chris Buechler

- Target version changed from 2.2.2 to 2.2.3

#14 - 06/01/2015 06:34 PM - Chris Buechler

- *Target version changed from 2.2.3 to 2.3*

#15 - 08/31/2015 09:05 PM - Jim Thompson

- *Assignee changed from Ermal Luçi to Matthew Smith*

reassigned to mgsmith.

#16 - 11/15/2015 01:06 AM - Jim Thompson

bump

as much as I dislike cRaptive portals, this needs to be fixed.

#17 - 12/08/2015 12:53 PM - Jim Thompson

- *Status changed from Feedback to Assigned*

#18 - 01/26/2016 04:47 AM - Jim Thompson

- *Assignee changed from Matthew Smith to Renato Botelho*

- *Target version changed from 2.3 to 2.4.0*

#19 - 08/11/2017 12:46 PM - Renato Botelho

- *Target version changed from 2.4.0 to 2.4.1*

It really needs to be re-engineered

#20 - 10/12/2017 10:09 AM - Jim Pingle

- *Target version changed from 2.4.1 to 2.4.2*

#21 - 10/23/2017 12:18 PM - Jim Pingle

- *Target version changed from 2.4.2 to 2.4.3*

#22 - 02/02/2018 09:34 AM - Steve Beaver

- *Status changed from Assigned to Closed*

It is unreasonable to keep kicking this down the road to target_version++ Closing and recording it for future consideration.

#23 - 02/16/2018 08:21 AM - Jim Pingle

- *Target version deleted (2.4.3)*