

pfSense - Feature #9251

DNS Resolver (Unbound) Python Integration

01/03/2019 10:34 PM - BBcan177 .

Status:	Resolved	Start date:	01/03/2019
Priority:	Normal	Due date:	
Assignee:	Jim Pingle	% Done:	100%
Category:	DNS Resolver	Estimated time:	0.00 hour
Target version:	2.4.5		
Description			
Add the python module integration to the DNS Resolver (Unbound)			
The only remaining function, would be to mount the /bin and /lib folders to the /var/unbound folder.			
<pre>mkdir -p /var/unbound/usr/local/bin mkdir -p /var/unbound/usr/local/lib mount_nullfs -o ro /usr/local/bin/ /var/unbound/usr/local/bin mount_nullfs -o ro /usr/local/lib/ /var/unbound/usr/local/lib</pre>			
I have coded the following for pfBlockerNG for testing purposes, but this will need to be adapted for pfSense and called at bootup before Unbound starts or it will fail to load without the mounts. It will also need notices/log info message code added. https://gist.github.com/BBcan177/b5d9506f9d1ca1ff2457f62bbaaaf878			

Associated revisions

Revision 741892ee - 01/10/2020 02:21 PM - Jim Pingle

Mount devfs for unbound when python is enabled. Fixes #9251

Revision d83d2280 - 01/10/2020 02:21 PM - Jim Pingle

Mount devfs for unbound when python is enabled. Fixes #9251

(cherry picked from commit 741892ee23a9085b71fa94cfb8375044fec6ee2)

History

#1 - 01/07/2019 01:26 PM - BBcan177 .

The final code for mounting the /bin and /lib folders has been submitted for review (Services.inc):
<https://github.com/pfsense/pfsense/pull/4029/commits/a4ca3a94fe7dbbed2177bcb3eccbd667bc6ca993>

#2 - 01/07/2019 03:09 PM - Joshua Sign

+1 : good feature !
nice work!

#3 - 08/13/2019 08:47 AM - Renato Botelho

- Category set to DNS Resolver
- Status changed from New to Feedback
- Assignee set to Renato Botelho
- Target version set to 2.5.0
- % Done changed from 0 to 100

PR has been merged. Thanks!

#4 - 01/07/2020 11:26 AM - Renato Botelho

PR 4155 has been merged to RELENG_2_4_5. Thanks

#5 - 01/07/2020 11:26 AM - Renato Botelho

- Target version changed from 2.5.0 to 2.4.5

#6 - 01/08/2020 11:17 AM - Jim Pingle

- File *netflix-no-aaaa.py* added

- Status changed from *Feedback* to *New*

This doesn't appear to be working on 2.4.5.

On 2.5.0 I can copy over *netflix-no-aaaa.py* (attached) and enable the module, select the script, and it works as expected (resolving *netflix.com* only returns A records. Without the script, both A and AAAA records are returned).

On 2.4.5, using the same actions, *unbound* fails to run. *Unbound* quits without logging any errors. Starting it manually in the foreground results in an error:

```
/usr/local/sbin/unbound -d -c /var/unbound/unbound.conf  
Fatal Python error: _Py_HashRandomization_Init: failed to get random numbers to initialize Python
```

#7 - 01/08/2020 11:34 AM - BBcan177 .

For my python PHP include files, I added a mount to address random number generation:

```
/sbin/mount -t devfs devfs /var/unbound/dev
```

```
devfs on /var/unbound/dev (devfs, local)
```

#8 - 01/08/2020 12:11 PM - Jim Pingle

If it's a required action, it should be done when setting up the environment. I'm mostly curious about why that isn't necessary on 2.5.0 but seems to be necessary on 2.4.5, though it may be a FreeBSD 11 vs 12 environment issue.

#9 - 01/10/2020 02:22 PM - Jim Pingle

- Assignee changed from *Renato Botelho* to *Jim Pingle*

Mounting *devfs* does fix the problem. I added some code to set that up as needed when the module is enabled.

#10 - 01/10/2020 02:30 PM - Jim Pingle

- Status changed from New to Feedback

Applied in changeset [741892ee23a9085b71fa94cfb8375044fec6ee2](#).

#11 - 01/14/2020 12:00 PM - Jim Pingle

- Status changed from Feedback to Resolved

Appears to work fine now on 2.4.5.a.20200114.0923 and 2.5.0.a.20200113.1543

#12 - 04/04/2020 04:34 AM - DRago_Angel [InV@DER]

@Jim maybe cool idea to add option to paste python files to unbound chroot like it done in HAproxy package from GUI so all users script will be written to confix.xml and will remain in users backups files?

#13 - 04/04/2020 07:51 AM - DRago_Angel [InV@DER]

About python module and python files, suggestion "option two":
add Notice *(i) to Python Module Script about:

1. If you want to add Python Modules and backup them install Filer Plugin
2. Put Python Modules in /var/unbound folder with 644 permissions with root:root owner
3. In case of usage Filer Plugin you can reload Unbound with Shell command in Filer on update/sync of file:

```
unbound-control -c /var/unbound/unbound.conf reload
```

#14 - 04/08/2020 07:09 AM - Carsten Grafflage

It's nice that there is the added option in the web config, but there is no hint whatsoever where to put these Python scripts. And also from reading this feature request it's not clear to me.

Files

netflix-no-aaaa.py	1.37 KB	01/08/2020	Jim Pingle
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