

pfSense - Feature #972

Allow adding gateways outside of interface subnet

10/25/2010 12:33 AM - Chris Buechler

| | | | |
|---|----------------|------------------------|------------|
| Status: | Resolved | Start date: | 10/25/2010 |
| Priority: | Normal | Due date: | |
| Assignee: | Chris Buechler | % Done: | 100% |
| Category: | Gateways | Estimated time: | 0.00 hour |
| Target version: | 2.3 | | |
| Description | | | |
| Gateways outside of the interface's IP subnet, on Ethernet links, cannot be added under normal circumstances as it's not really a valid config and FreeBSD won't add the default gateway as normal, and will not issue ARP requests for IPs outside of directly connected subnets. The work around to add such a gateway is to run: | | | |
| <pre># route add -net gatewayip/32 -iface em0 -cloning # route add default gatewayip</pre> | | | |

Associated revisions

Revision de34f1fc - 11/25/2015 05:14 PM - Pi Ba

Allow gateway outside interface subnet. Fixes #972, #1847, and was checked (on 2.2.5) with that provider to work properly for the IPv4 part. In 2.3 test machine IPv6 also seems to insert the proper routes.

History

#1 - 10/25/2010 03:21 PM - Seth Mos

As I understood from Remko Lodder there is a large ISP in .de that also employs this with their ipv6 configuration. Odd.

#2 - 11/16/2010 01:50 AM - Iñigo Martinez

Gateway test should check in both subnet interface and IP ALIAS subnet.
At this moment, only subnet interface is checked, but not subnet ip alias.

#3 - 09/06/2011 07:07 PM - Franck Bourdonnec

well, OVH big big french provider is also using this king of setup

A well english detailed big page explain all here

<http://blog.magiksys.net/pfsense-firewall-default-gateway-different-subnet>

Please implement your two lines fix asap when you detect the strange configuration !
Issue a warning if you want, but don't forbide it.

Franck

#4 - 08/15/2012 09:55 PM - Mike Noordermeer

This is an rather large issue for me, since my ISP is using HSRP for redundancy on IPv6, and they provide me a link-local address as gateway... I can't enter that address into PFSense and thus can't use an IPv6 IP.

#5 - 09/07/2012 02:48 PM - Jim Pingle

AT&T is doing this now on their network handing off DHCP with a /32 mask with certain uverse gear like the NVG510, so when we fix this, we'll need to also account for supporting this inside of dhclient-script

#6 - 08/20/2013 08:51 AM - Jim Pingle

Apparently -cloning has been deprecated in FreeBSD, so that parameter should be removed from the above command.

```
# route add -net gatewayip/32 -iface em0
# route add default gatewayip
```

#7 - 12/22/2013 02:39 PM - Oliver K.

Three years and counting... How is this still not implemented / patched?

#8 - 12/23/2013 06:34 AM - Chris Buechler

because accommodating 1 in 100,000 scenarios isn't a priority, especially when there is an easy manual work around. Patches welcome.

#9 - 12/23/2013 05:44 PM - Dan F

What would be the "correct" way to make this survive reboots, please?

#10 - 01/08/2014 09:18 AM - Dédé D

Hi Dan,

I felt in the same trouble, and I the idea I have found to survive reboot is using the ShellCmd package :

https://doc.pfsense.org/index.php/Executing_commands_at_boot_time

I added the workaround lines in comment [#6](#), and it works (OVH Hyper-V 2008 guest VM).

#11 - 11/25/2015 07:45 PM - Jim Thompson

- Assignee set to Chris Buechler

PR #2119 claims to fix this and [#1847](#)

Please evaluate and report.

#12 - 11/25/2015 07:46 PM - Jim Thompson

- Target version changed from Future to 2.3

target set to 2.3

change it back if we don't want to add this now.

Looks like a low-drama PR though.

#13 - 11/25/2015 10:22 PM - Chris Buechler

- *Category set to Gateways*
- *Status changed from New to Feedback*

It works, went ahead and merged it. The deletion doesn't happen correctly, added a comment to that PR, hopefully PiBa can follow up with a fix there.

Leaving for verification again once it's in a snapshot.

#14 - 11/25/2015 10:30 PM - Pi Ba

- *% Done changed from 0 to 100*

Applied in changeset [de34f1fc12f29db0348f8ff9b1bc8300d9fb74d2](#).

#15 - 01/15/2016 08:02 PM - Chris Buechler

- *Status changed from Feedback to Resolved*

these are added and removed correctly now