

## pfSense - Bug #7742

### 1:1 NAT for IPv6 applies wrong subnet mask to "Single Host"

07/31/2017 04:54 PM - Adam Thompson

<b>Status:</b>	Resolved	<b>Start date:</b>	07/31/2017
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>	Renato Botelho	<b>% Done:</b>	100%
<b>Category:</b>	Rules / NAT	<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>	2.5.0	<b>Affected Architecture:</b>	
<b>Affected Version:</b>	2.3.4		

#### Description

Adding an IPv6 1:1 NAT entry and choosing "Single Host" produces the resulting rule in /tmp/rules.debug: binat on vmx0 from fd60:7f9c:65d8:1::2/32 to any -> 2607:5300:79:501:167:114:147:50/32 which is, well, wrong. I really don't want to NAT an entire /32's worth of address space, thanks.

Workaround: select "Network" instead of "Single Host" and choose "/128" as the subnet mask. That correctly generates the rule: binat on vmx0 from fd60:7f9c:65d8:1::2 to any -> 2607:5300:79:501:167:114:147:50

#### Associated revisions

##### Revision 91efd993 - 06/25/2020 01:17 AM - Viktor Gurov

1:1 NAT IPv6 subnet mask fix. Issue #7742

#### History

##### #1 - 07/31/2017 04:55 PM - Adam Thompson

(I believe this is why I thought IPv6 NAT was broken in [#7740](#). Not 100% sure. Made enough mistakes today I'm not sure of anything anymore.)

##### #2 - 07/31/2017 05:00 PM - Adam Thompson

Also, when re-editing that 1:1 NAT rule, the GUI repeatedly resets the prefix length to "31". This, again, breaks all IPv6 (due to the subsequent NDP adjacency failure) if you don't notice it when you click Save and Apply.

##### #3 - 08/14/2017 12:36 PM - Adam Thompson

While working through ticket #25935 with Chris Linstruth (from Netgate support) I just observed something very odd on my firewall: A similar effect seems to strike the NPT mappings page; I had only ever entered /128 or /64 as the prefix length, but when going back to view it, it's now set to /112. Is there any code in common between the 1:1 NAT page and the NPT page? Or replicated code, perhaps? I haven't had time to look at the source for either...

Scratch that, Chris put the /112 in there. The original bug stands, though.

##### #4 - 06/25/2020 01:19 AM - Viktor Gurov

Fix:  
<https://github.com/pfsense/pfsense/pull/4372>

##### #5 - 06/25/2020 07:38 AM - Jim Pingle

- Status changed from New to Pull Request Review  
- Target version set to 2.5.0

**#6 - 06/26/2020 10:54 AM - Renato Botelho**

- *Status changed from Pull Request Review to Feedback*
- *Assignee set to Renato Botelho*
- *% Done changed from 0 to 100*

PR has been merged. Thanks!

**#7 - 10/06/2020 10:17 AM - Steve Beaver**

- *Status changed from Feedback to Resolved*