Subject: sixxs subnet + venet
Posted by Obi_Wan on Sat, 20 Jun 2009 09:57:47 GMT
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Hi,

I've created a sixxs tunnel for my root server and everything works fine on the hardware node. I can use ipv6 perfectly. Now I registered a subnet and wanted to assign the ipv6 to my VEs. I added an ipv6 address with vzctl however now I can't ping the ipv6 from the hardware node and I can't ping the hardware node from the VE. The VE only says network is unreachable however ipv4 works perfectly.

Could that behaviour be caused because the tunnel and the subnet have different prefixes? Forwarding is actually enabled.

I would be happy about any help I could get.

Thanks.

Subject: Re: sixxs subnet + venet
Posted by djechelon on Sun, 21 Jun 2009 12:51:45 GMT
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Is it a static tunnel (SIT) or AYIYA?
Isn't it easier to have just one IPv6 subnet (64 bit, 2^64~10^7 hosts) for the HN and all the VPS hosts?

I have no practical experience with OpenVZ hardware nodes, but I know IPv6 quite well.
Does your HN have two IPv6 addresses, one for the SIT tunnel and one as the default gateway of the subnet?

Assuming that your tunnel's endpoint is 2001:0DB8::aaaa:0002 and your subnet is 2001:0DB8::bbbb:0000/112 (these are just examples, no IPv6 subnet has 16 bits for host address, but I don't care now, it makes numbers simpler), you need to be sure that:

*SixXS advertises 2001:0DB8::bbbb:0000/12 on BGP, else nobody will be able to know where to go to reach your network. You don't need to run BGP on your own
*Your HN is part of both the IPv6 subnets (the one for the tunnel, and the subnet you obtained), so you may probably want to add a virtual loopback interface with IP 2001:0DB8::bbbb:0001 (or :fffe, whatever)
*Forwarding rules are set between both the interfaces, and each virtual host knows that its default gateway is 2001:0DB8::bbbb:0001 (which will forward everything to 2001:0DB8::aaaa:0002, which will forward everything via tunnel to 2001:0DB8::aaaa:0001's IPv4 address)

So then, what are your IPv6 details? What does ifconfig return?

[Follow-up] I forgot a couple of things:

*I assumen that you enabled ipv6 module on ALL containers
*Hurricane Electric (www.tunnelbroker.net) provides you with a fuly functional IPv6 subnet tunnelled on your IPv4 host

Also, if you own multiple hardware nodes and want to enable IPv6 for all your containers, a router-based solution (configuring the tunnel and the IPv6 subnet on your exit router rather than on each HN) would surely be more elegant and scalable.
