

Re: Please Gurus here solve my simple nw problem

Source: <http://linux.derkeiler.com/Newsgroups/comp.os.linux.networking/2003-09/0694.html>

From: Creideiki (creideiki_at_cfl.rr.com)

Date: 09/10/03

Date: Wed, 10 Sep 2003 08:45:42 GMT

On Wed, 10 Sep 2003 08:45:27 +0200, news.t-online.de <gyry@gmx.de> wrote:

>

> ----- Original Message -----

> From: "Llanzlan Klazmon The 15th" <Llanzlan@Llurdiaxorb.net>

> Newsgroups: comp.os.linux.networking

> Sent: Wednesday, September 10, 2003 12:30 AM

> Subject: Re: Please Gurus here solve my simple nw problem

>

>

>> "news.t-online.de" <gyry@gmx.de> wrote in

>> news:bjl52s\$3dm\$00\$1@news.t-online.com:

>>

>>> Hi,

>>> "I am finally stuck up " type of post. I will first explain how my

>>> network is built and the problems I am having. I earnestly request the

>>> altruists here to help me out.

>>>

>>> Physical network

>>> *****

>>>

>>>

>>> USERLAN<-----> HUB <---->(eth0)GENTOO ROUTER(eth1)<--Crossover

>>> cable----->(eth0)AnotherGentoo

>>>

>>> So that was about the physical connections of my network.

>>>

>>> Now..the software part of networking. I decided to keep USERLAN and

>>> connected eth0 of router in 192.168.0.0 network. So simply speaking

>>> all computer connected directly to HUB are having 192.168.0.x network

>>> address. Coming to other side of router, I have decided a simple

>>> 192.168.1.0 network, so eth1 of router and Gentoo system have

>>> 192.168.1.1 and 192.168.1.2 addresses respectively.

>>>

>>> I would like to list the commands I used here to setup up this routing

>>> table:

>>> AT ROUTER:

>>> 1. route add 192.168.0.0 eth0

>>> 2. route add 192.168.1.0 eth1

>>

>> You shouldn't need to do this. Both of those subnets are already known to

>> the router by virtue of being directly connected networks. I.e they are

>> specified by the address and subnet masks you set up on the router eth0 &

>> eth1.

> Ya, right! everything here is set by default.

>

>

>

>>

>>>

>>> AT Another Gentoo:

>>>

>>> 1. route add default gw 192.168.1.1

>>> 2. route add 192.168.0.0 gw 192.168.1.1

>>

>> The second line is superfluous.

> I was thinking the same.

>

>>

>>>

>>> With this simple setup, I am able to ping router's eth0 and eth1 from

>>> Gentoo system. but I am not able to ping USERS from Gentoo system! I

>>> did set ip forwarding to 1.

>>

>> The hosts on USERLAN have to have 192.168.0.1 as their default gw.

> I forgot! I did this and the effect is seen in the routing tables i pasted

> below.

If this is the case, then most of the machines in USERLAN, including 192.168.0.2 will try to use 192.168.0.1 as their next hop towards the 192.168.1.0/24 net, when the only machine you have said that can get there is 192.168.0.111.

>>

>>

>>>

>>> Also on the router if I " ping -I eth0 192.168.1.1" it fails. Also

>>> "ping -I eth1 192.168.0.1" too fails.. So I think if i make the

>>> routing between the 2 eth in router, I can make whole network

>>> conected. Am I correct?

>>

>> Are you allowing packet forwarding, netfilter?

> I have enabled packet forwarding in my system to 1. But I have not even

> installed netfilter! Is this a kernle module or somethin or an application?

> Why actually i need netfilter? Firewall?

>

>

comp.os.linux.networking: Re: Please Gurus here solve my simple nw problem

>
>>
>>
>> >I hope my explanation about my problem was
>> > clear. If you need any more info, I am here waiting to pump in more
>> > detail. Here r my network routes:
>> >
>> > ROUTE TABLE AT AnotherGentoo (192.168.1.2 eth0)
>> > Kernel IP routing table
>> > Destination Gateway Genmask Flags Metric Ref Use Iface
>> > 0.0.0.0 192.168.1.1 255.255.255.0 UG 0 0 0 eth0
>> > 192.168.1.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0
>> > 192.168.0.0 192.168.1.1 255.255.255.0 UG 0 0 0 eth0
>> >
>> > ROUTE TABLE at Router(eth0-192.168.0.111 eth1-192.168.1.1)
>> > erver root # route -n
>> > Kernel IP routing table
>> > Destination Gateway Genmask Flags Metric Ref Use Iface
>> > 192.168.1.0 0.0.0.0 255.255.255.0 U 0 0 0 eth1
>> > 192.168.0.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0
>> > 127.0.0.0 127.0.0.1 255.0.0.0 UG 0 0 0 lo
>> > 0.0.0.0 192.168.0.1 0.0.0.0 UG 0 0 0 eth0
>> >
>> > here 192.168.0.1 is in USERS LAN ..presently I am having DSL
>> > connection here.
>> >
>> > The problem is , from 192.168.1.2 I am able to ping 192.168.1.1,
>> > 192.168.0.111..BUT I am not able to ping 192.168.0.1!!!! Strange! I am
>> > not able to debug this stuff.. PLease help me out at this cliff!
>>
>> > This is odd. Are you sure you are not blocking certain things in
>> > netfilter?
> > I am sure, I dont have any netfilter or something. ping -I eth0 192.168.1.1
> > (ping to other interface of the router also fails!!!!) What the heck?
>
>
>>
>>
>> >
>> > If anybody can hepl me out! "karamba!" wud be gr8.
>> > Thanx,
>> > Giri
>
> > Thanx again. Plese help me out.
> > With regards,
> > Giri

The machines in USERLAN need to be told that to get to 192.168.1.0/24 they have to route through 192.168.0.111.

Re: Please Gurus here solve my simple nw problem

comp.os.linux.networking: Re: Please Gurus here solve my simple nw problem

You can do this by specifying 192.168.0.111 is the gateway for all machines on 192.168.0.0/24 (excepting 192.168.0.1 and 192.168.0.111. 102.168.0.1 should be left alone to route internet traffic over its DSL. 192.168.1.111 (ROUTER) should route 0.0.0.0 (gateway) to 192.168.0.1, and have routes for each of the subnets on both its ethernet cards.

Or you can leave 192.168.0.1 as the gateway, but give it a static route for 192.168.1.0/24 via 192.168.0.111. Then packets for 192.168.1.0/24 send from most of USERLAN will go via the gateway at 192.168.0.1 to 192.168.0.111 and then onto the 192.168.1.0/24 net

Or you can specify a static route to 192.168.0.111 for 192.168.1.0/24 on every machine on USERLAN.

If you don't pick one of those methods, most machines on USERLAN, including 192.168.0.2 will try to send 192.168.1.0/24 traffic to 192.168.0.1, who will try to send it out the DSL.