

Re: PPPD server routing problem? Mandrake/mgetty/pppd/D-link router

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From: Clifford Kite (*kite_at_see.signature.id*)

Date: 10/06/03

Date: Mon, 6 Oct 2003 10:06:50 -0500

martin02 <lutherpFORTY@bellsouth.net> wrote:

> *Clifford Kite wrote:*

>> *If you have a small subnet allotted to you then assigning a second IP
>> address in that subnet to the PPP client should work. Otherwise the
>> only solution I can see would be to set up SNAT for the client on the
>> server through 192.168.0.133, and then you should be able to use any
>> private IP address (except 192.168.0.133) for the client.*

> *Well, from what I've read on any HowTo's that were even vaguely related,
> I have mgetty and pppd working 'as advertised'. When the win98 client is
> dialed in and logged on, I can do any normal operation over ppp that you
> could when connected to the internet. BUT!! only at/with the pppdserver
> machine only. No access to anything beyond the PPPD server. With the
> exception that some pings 'beyond' do work. Go figure.*

I figured that sub-netting could be byting (sic) you. The DSL TA is attached to the server by Ethernet and something is NATing the private addresses within some IP range, as evidenced by the fact that it seems that some of the other hosts on your LAN can access Internet sites.

But apparently at least one other host on the LAN can't, so it seems here's a subnet assigned to you somewhere. That host had 110 as the last octet in it's IP address, which is the last IP address a subnet resulting from /28 (14 IP addresses) or smaller sub-netting. The server host ends in 113 which is the first host on the subnet above one that includes 110.

However, saying that subnetting of 192.168.0.0 is causing the problem **may** contradict your assertion that

Local LAN – Private IP addresses assigned by the D-Link router all in the 192.168.0.0 net

but it depends on whether you meant "in the 192.168.0.0/16 network" or not. The "assigned by the D-Link router" bothers me since that could mean that the router doles out the IP addresses that it will

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route via DHCP, not unreasonable since there is no sign in your posts that PPPoE is directly involved on your side of the router. That may mean the IP address assigned to the PPP client is ignored by the router.

Please note this is all speculation, since I've no experience with anything similar to what you have.

A straight-forward dial-in to a PPP "server" on a LAN with a subnet of routable IP addresses works with proxyarp activated on the server LAN interface for the dial-in's IP address (which must belong to the LAN subnet) and a default route on the server to an Internet gateway on the LAN. This I know because I've done it.

*> That puts me into trying to figure out why iptables keeps giving me a
> "invalid argument" or "invalid target" errors for all my attempts
> to add a POSTROUTING chain. See my other thread here titled:
> " iptables - "invalid argument" error ? "*

I was surprised that

```
iptables -t nat -A POSTROUTING -o eth0 -j MASQUERADE
```

produced that message. It worked here – without the message – when I masqueraded an ISP PPP connection for a host on the same LAN subnet as my dial-in host, using iptables version 1.2.6a. Iptables does make my head hurt though. :) I started with a firewall/masquerade script off the Internet and managed to tailor it to do what I wanted.

> You wouldn't think that hooking this up would be so head-bangingly fun!

Think of it as "gathering karma."

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--  
Clifford Kite                               Email: "echo xvgr_yvahk-ccc@ril.arg|rot13"  
PPP-Q&A links, downloads:                   http://ckite.no-ip.net/  
/* Microsoft is a great marketing organization.  
* It _has_ to be */
```