

Re: dhcpd assigns address, but DNS resolvers and ping fail

# Re: dhcpd assigns address, but DNS resolvers and ping fail

---

*Source:* <http://unix.derkeiler.com/Mailing-Lists/FreeBSD/questions/2007-03/msg02781.html>

---

- *From:* David Benfell <[benfell@xxxxxxxxxxxxxxxxxxxxx](mailto:benfell@xxxxxxxxxxxxxxxxxxxxx)>
  - *Date:* Sat, 31 Mar 2007 09:54:37 -0700
- 

On Sat, 31 Mar 2007 11:01:30 -0400, Lowell Gilbert wrote:

David Benfell <[benfell@xxxxxxxxxxxxxxxxxxxxx](mailto:benfell@xxxxxxxxxxxxxxxxxxxxx)> writes:

Another in my mysterious problems list...

pf.conf is set up to allow icmp anywhere. And dhcpd offers a plausible IP address and gateway that the client (tested under both Linux and Windows) accepts.

The client doesn't get the DNS resolver information and can't ping anywhere, even by raw IP address, even to the router. The router also fails to ping the client.

Yeah, offhand it looks like it *should* work.  
Fairly complicated setup; make sure you really need those shared-networks if you're using them.  
Have you tried putting the domain-name-servers entries at the subnet or global scope?

It *is* a fairly complicated setup. I noticed some kernel arp messages claiming the client wasn't on the network, so I've just gotten back from checking that I had things wired up right.

I *think* I do. ifconfig reports that all the interfaces that are supposed to have connections do and the ones that aren't don't. And I've checked all the other networks recently enough to know that they're correctly connected.

But there is this one aggravating message that doesn't make any sense to me. In order to explain it, I have to reveal a bit of the network setup. (ifconfig -a output attached)

66.93.170.241 is the LAN address on the T1 router from my ISP.

Re: dhcpd assigns address, but DNS resolvers and ping fail

Re: dhcpd assigns address, but DNS resolvers and ping fail

It \*is\* on interface xl0. I know this (I think) because I can access the outside world without difficulty on this system. The network bits for this seem properly arranged.

sf1 is the interface I use to my VOIP box, which has a web interface, and that's all I use that interface for. The VOIP box is just that, something I got from my ISP (Speakeasy). I'm getting arp messages that say 66.93.170.241 is on xl0 but got a reply from (some MAC address) on sf1.

For whatever reason, I wasn't getting these messages when this was an OpenBSD box.

Meanwhile sf0 is the network that has this public DHCP interface and I have other interfaces available (including one that OpenBSD didn't support—Thanks FreeBSD!) for if I ever need to plug the community I live in and share my T1 with back into \*my\* local router again.

Now, in response to your suggestions, I am trying getting rid of the 192.168.17.x DHCP range in the configuration. This is not currently in use (and I think I actually meant to have that on a different interface anyway). I have also copied the declarations you suggested into the subnet setup; this got the correct DNS resolver information onto the client.

But I'm still not able to ping (in either direction) and DNS resolution doesn't work on the client.

Thanks!

---

David Benfell, LCP  
benfell@xxxxxxxxxxxxxxxxxxxx

---

Resume available at <http://www.parts-unknown.org/>

NOTE: I sign all messages with GnuPG (0DD1D1E3).

```
sf0: flags=8843<UP,BROADCAST,RUNNING,SIMPLEX,MULTICAST> mtu 1500
inet 192.168.17.1 netmask 0xfffff00 broadcast 192.168.17.255
inet 192.168.20.1 netmask 0xffffffff broadcast 192.168.20.1
inet 192.168.17.242 netmask 0xffffffff broadcast 192.168.17.242
inet 192.168.17.249 netmask 0xffffffff broadcast 192.168.17.249
ether 00:00:d1:f0:24:2d
media: Ethernet autoselect (100baseTX <full-duplex>)
status: active
sf1: flags=8843<UP,BROADCAST,RUNNING,SIMPLEX,MULTICAST> mtu 1500
inet 192.168.102.2 netmask 0xfffff00 broadcast 192.168.102.255
ether 00:00:d1:f0:24:2e
media: Ethernet autoselect (100baseTX <full-duplex>)
status: active
sf2: flags=8802<BROADCAST,SIMPLEX,MULTICAST> mtu 1500
ether 00:00:d1:f0:24:2f
```

Re: dhcpd assigns address, but DNS resolvers and ping fail

Re: dhcpd assigns address, but DNS resolvers and ping fail

```
media: Ethernet autoselect (none)
status: no carrier
sf3: flags=8843<UP,BROADCAST,RUNNING,SIMPLEX,MULTICAST> mtu 1500
inet 192.168.19.1 netmask 0xfffff00 broadcast 192.168.19.255
inet 192.168.19.30 netmask 0xffffffff broadcast 192.168.19.30
inet 192.168.19.31 netmask 0xffffffff broadcast 192.168.19.31
inet 192.168.19.32 netmask 0xffffffff broadcast 192.168.19.32
inet 192.168.19.60 netmask 0xffffffff broadcast 192.168.19.60
inet 192.168.19.61 netmask 0xffffffff broadcast 192.168.19.61
inet 192.168.19.62 netmask 0xffffffff broadcast 192.168.19.62
inet 192.168.19.242 netmask 0xffffffff broadcast 192.168.19.242
ether 00:00:d1:f0:24:30
media: Ethernet autoselect (100baseTX <full-duplex>)
status: active
dc0: flags=8843<UP,BROADCAST,RUNNING,SIMPLEX,MULTICAST> mtu 1500
options=8<VLAN_MTU>
inet 192.168.18.1 netmask 0xfffff00 broadcast 192.168.18.255
inet 192.168.18.30 netmask 0xffffffff broadcast 192.168.18.30
inet 192.168.18.31 netmask 0xffffffff broadcast 192.168.18.31
inet 192.168.18.32 netmask 0xffffffff broadcast 192.168.18.32
ether 00:a0:cc:65:ba:d0
media: Ethernet autoselect (100baseTX <full-duplex>)
status: active
xl0: flags=8843<UP,BROADCAST,RUNNING,SIMPLEX,MULTICAST> mtu 1500
options=8<VLAN_MTU>
inet 66.93.170.242 netmask 0xfffff00 broadcast 66.93.170.255
inet 66.93.170.244 netmask 0xffffffff broadcast 66.93.170.244
inet 66.93.170.245 netmask 0xffffffff broadcast 66.93.170.245
inet 66.93.170.246 netmask 0xffffffff broadcast 66.93.170.246
inet 66.93.170.247 netmask 0xffffffff broadcast 66.93.170.247
inet 66.93.170.248 netmask 0xffffffff broadcast 66.93.170.248
inet 66.93.170.249 netmask 0xffffffff broadcast 66.93.170.249
inet 66.93.170.250 netmask 0xffffffff broadcast 66.93.170.250
inet 66.93.170.251 netmask 0xffffffff broadcast 66.93.170.251
inet 66.93.170.252 netmask 0xffffffff broadcast 66.93.170.252
ether 00:60:97:58:f4:49
media: Ethernet autoselect (100baseTX <full-duplex>)
status: active
vr0: flags=8802<BROADCAST,SIMPLEX,MULTICAST> mtu 1500
ether 00:40:63:c3:80:0e
media: Ethernet autoselect (none)
status: no carrier
lo0: flags=8049<UP,LOOPBACK,RUNNING,MULTICAST> mtu 16384
inet6 fe80::1%lo0 prefixlen 64 scopeid 0x8
inet6 ::1 prefixlen 128
inet 127.0.0.1 netmask 0xff000000
pflog0: flags=141<UP,RUNNING,PROMISC> mtu 33208
# $OpenBSD: dhcpd.conf,v 1.1 1998/08/19 04:25:45 from Exp $
#
# DHCP server options.
# See dhcpd.conf(5) and dhcpd(8) for more information.
```

Re: dhcpd assigns address, but DNS resolvers and ping fail

Re: dhcpd assigns address, but DNS resolvers and ping fail

```
#  
  
# Network: 192.168.20.0/255.255.255.0  
# Domain name: cybernude.org  
# Name servers: 192.168.19.4  
# Default router: 192.168.17.1  
# Addresses: 192.168.20.2 – 192.168.20.254  
#  
shared-network LOCAL-NET {  
option domain-name "cybernude.org";  
option domain-name-servers 192.168.18.31, 192.168.19.130, 64.81.79.2, 216.231.41.2;  
  
#subnet 192.168.17.0 netmask 255.255.255.0 {  
#option routers 192.168.17.1;  
#}  
subnet 192.168.20.0 netmask 255.255.255.0 {  
option domain-name "cybernude.org";  
option domain-name-servers 192.168.18.31, 192.168.19.130, 64.81.79.2, 216.231.41.2;  
option routers 192.168.20.1;  
range 192.168.20.2 192.168.20.254;  
}  
}  
  
#domain cybernude.org  
#nameserver 192.168.19.130  
#nameserver 192.168.18.31  
#nameserver 64.81.79.2  
#nameserver 216.231.41.2  
  
#shared-network LUPIN {  
#option domain-name "cybernude.org";  
#option domain-name-servers 192.168.18.31;  
  
#subnet 192.168.100.0 netmask 255.255.255.0 {  
#option routers 192.168.100.1;  
#range 192.168.100.100 192.168.100.200;  
#}  
#}  
ddns-update-style ad-hoc;
```

**Attachment:** [pgp1BTZYmf3Zq.pgp](#)

Description: PGP signature