

## RE: Problems getting 2 NICs to work.

**Source:** <http://linux.derkeiler.com/Mailing-Lists/Fedora/2004-05/3753.html>

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**Date:** 05/18/04

To: "'For users of Fedora Core releases'" <[fedora-list@redhat.com](mailto:fedora-list@redhat.com)>

Date: Tue, 18 May 2004 10:11:18 -0600

Tuesday, May 18, 2004 9:07 AM Kevin Kimmell replied:

> *Below are the contents of the config files. And as for how it's*  
> *working... my guess is that it's working because I'm running both of*  
> *those class C's out of the same ethernet interface on the*  
> *same router.*  
> *All of the switches on my public network share the traffic of both*  
> *ranges. Therefor that same eth port on the linux box is*  
> *plugged in to a*  
> *switch that has direct access to both ranges.*

The physical network (wires/switches) in this case has nothing to do with the why the logical network (IP) is working with multiple network addresses defined. While having both IP ranges exist on the same switch is not what I would consider an optimal configuration, there's nothing wrong with it if bandwidth is your only concern. We can talk about fault tolerance later.

Running both class C's on the same interface is likewise not optimal, but whether you're using a physical interface or a logical one as in this case, multihoming linux is normally not a big deal.

The two problems Kevin has experienced are as follows:

1) Gateway statements define default routes. In general multihomed machines don't like default routes. A default route is, by definition, a singular entity. THERE CAN BE ONLY ONE! That kind of cramps the style of most multihomed implementations.

For routers/gateways, a default route on the external interface is OK, but still be careful. For a multihomed server, in either fault-tolerant, load balanced or bandwidth intensive configurations, default routes defeat the purpose of creating the multiple connections.

Static routes are a much better solution.

2) His second physical interface is killing his first. Strange at first, but see below... :>)

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```
> [root@dtweb02 network-scripts]# cat ifcfg-eth0
> ...
> DEVICE=eth0
> HWADDR=00:0E:7F:37:5B:53
>
> [root@dtweb02 network-scripts]# cat ifcfg-eth01
> ...
> HWADDR=00:0C:72:30:52:53
```

Your interface configs are for the same physical device.

>From your earlier posting

```
> 4: eth0: <BROADCAST,MULTICAST,UP> mtu 1500 qdisc pfifo_fast qlen 1000
> link/ether 00:0e:7f:30:52:53 brd ff:ff:ff:ff:ff:ff
> inet 12.168.88.12/24 brd 12.168.88.255 scope global eth0
> inet 204.117.218.12/24 brd 204.117.218.255 scope global eth0
> 5: eth1: <BROADCAST,MULTICAST> mtu 1500 qdisc noop qlen 1000
> link/ether 00:0e:7f:30:52:52 brd ff:ff:ff:ff:ff:ff
```

You can see that eth1 should have hardware address 00:0e:7f:30:52:52.

Change that in ifcfg-eth1... Oops, you posted ifcfg-eth01. Check the hardware address in ifcfg-eth1 to make sure it's set to the :52 address. If it's not, then please post that.

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