

Re: One computer on 2 networks

Source:

<http://www.tech-archive.net/Archive/Windows/microsoft.public.windows.server.networking/2007-04/msg00255.html>

- *From:* "Bill Grant" <not.available@online>
 - *Date:* Tue, 17 Apr 2007 17:45:47 +1000
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You can only have one default gateway, and that should be out to the Internet. The gateway setting on the 172.30 NIC should be blank.

To get traffic for 172. addresses to a different router you should only need one static route. If they were all 172.30 addresses you would use

```
route add -p 172.30.0.0 255.255.0.0 <router IP>
```

If they are not all 172.30 you need to use a shorter network mask (so that it covers more addresses). To redirect all packets beginning with 172 you would use

```
route add -p 172.0.0.0 255.0.0.0 <router IP>
```

"John Francisco Williams" <JohnFranciscoWilliams1010@xxxxxxxxxx> wrote in message news:%23alCt5HgHHA.4704@xxxxxxxxxxxxxxxxxxxxxxxxxxxx

Grep,

Thanks a lot for your help. The default gateway in the LAN where NIC1 is, is 172.30.204.100. Is that the one you suggest me to use? Sorry to bother: How exactly would the Route Add sentence be?

Thanks again,

Frank

"grep" <grep@xxxxxxxxxxxxxxxx> wrote in message news:eOy4zQGgHHA.1220@xxxxxxxxxxxxxxxxxxxxxxxxxxxx

Hey Frank,

For your internal networking issue, the deal is that your mask (255.255.252.0) says that subnetting your class B network (172.30.0.0) into 6 subnets. i.e. 172.30.0.0 is a different network than 172.30.8.0. And you say that you have hosts in networks that aren't even in 172.30.0.0 space.

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Now when you cross over any network boundary, you need to have a router (aka gateway.) When you try to go from 172.30.0.5 to 172.30.16.7 or 172.22.0.129, your machine is going to know (because of the mask) that those machines are not on its network. Since they aren't on its network, it doesn't know how to find them, unless you tell it.

There are effectively two ways you can tell it:

1. Adding static routes for your other network, and pointing them toward the appropriate router(s) to reach them.
2. Setting your default route to the local router, and let it direct your traffic.

In your case, you can't do the latter because you can only have one default route on a machine, and yours must point to the Internet gateway.

Probably the easiest thing to do for you would be to add a route to 172.16.0.0 255.240.0.0 and point it to your local router on the NIC1 side. (I'm assuming, of course, that you have one router to which you direct all the internal network routes anyway.)

Good luck!

grep

John Francisco Williams wrote:

Hi All,

I have a computer that has 2 NICs, each connecting to a different network.

NIC1:
172.30.204.100 Static
255.225.252.0

NIC2:
192.168.1.10 Static
255.255.255.0
Def Gateway: 192.168.1.254

Through NIC1, I need to have access to LAN resources: 2 printers, 2 web servers in the intranet, a file server, a POP3 server. Those resources are all 172.x.x.x. NOT all of them are 172.30.x.x

Through NIC2, I need to have access to the internet.

Access to internet through NIC2, is working well but, to

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have access to the LAN resources, through NIC1, I've been having to do manual route add, for each resource. Resources are added constantly. All I know of these resources, is that they all start with 172.... (this looks like a Cert exam!! :-D) . My question: Is what I've been doing (Route Add), the correct solution or, is there a better way to do it? There's probably more information missing here (my apologies for that). If that's the case, please, let me know what other information is needed, to find an answer.

One other thing: When I tried to enter a default gateway for NIC1, while keeping the one for NIC2, I got an error message stating that I should only have one default gateway and, effectively, network communication fails, if I keep both.

Thank you all for the help. Have a great day,

Frank