

Re: Server with 3 NICs

Source:

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From: Phil S. (*nospam-m-phil-NoSpam_at_123.net*)

Date: 07/01/04

Date: Thu, 1 Jul 2004 17:59:45 -0400

You seem, by this and other posts, somewhat lost.

I am going to give you my \$0.02 cents advise. The best advise I could give you right now is, hire a consultant. What you ask is part of MCSE, MCSA core certification tests (70-290, 291, 293, 294) and the SBS certification test Network Solutions for Small and Medium Sized Business (70-282).

1- Never, unless you absolutely have to, use an extra NIC card. Then re-think your need again. And If you still need an extra NIC, RE-THINK AGAIN!!!
The network administrative work too much. You always have better (more desirable) things to do. (you do realize you will not be very stable with the third NIC card, and will have to devote many man-hours fighting obscure network connection problems across your network.)

2- Remote sites should be set up with SBS Active Directory Sites and Services. Be sure to set up speed of link between sites. (DHCP Manually setup? DNS manually added site?)

3- If you are going to use a router to connect a remote location You should / must set the route path in a command prompt
route add -p x.x.x.x mask y.y.y.y z.z.z.z (see command prompt help)

4- Your server internal NIC should go to a switch / hub. from the switch / hub should be a connection to the router for the remote location. Due to cross-over cable problems (by tradition a red Ethernet cable) you may have to replace the cable connecting you router to your server.

5- You really need to re-think your entire network, and it may be a really long weekend to re-configure it.

I know this is not going to help you in your immediate problems.

Phil S.

<ineedtoknow@knowledge.com> wrote in message
news:24b6101c45f98\$a845a220\$a401280a@phx.gbl...

> *No offense taken.*
> *I fixed the two you mentioned. I removed the WINS from*
> *the External, and the DNS for the external is the*
> *firewall IP.*
> *If I entered a third subnet for the third card, how the*
> *OS is going to know is for LAN and not for Internet?*
> *I know this (multihomed) is not easy but I do not see*
> *any other solution.*
> *OS 2003 With Isa needs a Nic for Internet connection, one*
> *NIC for LAN connection. and third NIC for second segment.*
> *Thanks for your help.*

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

>>
>> *Others will reply, I am going to address just a single*
>> *point in your post:*
>> *TCP/IP addressing.*
>> *You have other problems like DNS on external not showing*
>> *ISP, and WINS*
>> *enabled on External NIC.*

>>
>> *Any server OS needs to know which physical card to send*
>> *a packet of traffic*
>> *to for network communications. If you have more than*
>> *one NIC installed, by*
>> *the address and the mask, the OS will know which*
>> *physical card on the*
>> *expansion bus to send the packet. (the exceptions that*
>> *I know of:*
>> *Microsoft ISA is installed or one of the SBS series of*
>> *OS)*

>>
>> *For example: 10.0.100.xxx with a 24 bit mask*
>> *(mask=255.255.255.0) means that*
>> *any packet sent to the network over that NIC must be in*
>> *the range of*
>> *10.0.100.001 thru 10.0.100.254 (1st (000) and last (255)*
>> *held in reserve.)*
>> *If you sent a packet to address 10.0.100.119 and another*
>> *to address*
>> *100.0.100.129 they would go to the same physical NIC*
>> *card.*

>>
>> *If you have two network cards, the emphatically*
>> *recommended practice is to*
>> *use two separate IP or mask ranges.*
>> *For Example:*

> >NIC #1 10.0.100.xxx / 24 (/ 24 = = mask
> 255.255.255.0)
> >NIC #2 10.0.111.xxx / 24
> >and if you want a third
> >NIC #3 10.0.222.xxx / 24
> >(all the options and schemes fill a small book)
> >
> >ISA server can hold a specific address for its self.
> However, every SBS
> >networking document, be it from MS, or MVP, or what ever
> All recommend that
> >your networking IP addressing conform to the normal usage
> >
> >If you don't conform to this scheme, every time you boot
> up your SBS box,
> >the
> >OS will query the three NICs. One will be held for ISA,
> but it will be
> >random which of the other two will be assigned as the
> NIC to handle your
> >internal network. It seems you have been lucky in that
> your reboots have
> >assigned your original internal NIC to your network,
> otherwise your client
> >computers would not be getting to the network.
> >
> >Please do not be offended by my reply. You have several
> things wrong with
> >you IP address scheme. It is just a matter of a
> learning curve.
> >
> >If you are adding a third NIC, for example, you want
> your backup program to
> >run on its own separate physical network, and just talk
> to your servers.
> >(you
> >are going to multi-homed all your servers?) You should
> be aware there are
> >many problems like DNS. You may also need to get into
> setting up HOST
> >and LMHOST files. It is not Trivial to do.
> >
> >Phil S.
> >
> >
> ><Ineedtoknow@knowledge.com> wrote in message
> >news:2452401c45f82\$c61923a0\$a301280a@phx.gbl...
> >> I have a SBS 2003 Server with 3 Nics, running ISA 2000.
> >> 1 Nic for the LAN 10.0.10.120
> >> 1 Nic is for the Internet Connection 10.0.100.120
> >> Everythings was working fine

> >> *Now I am enabling the third Nic for a second LAN
> segment
> >> that comes from a router. IP is 10.0.100.121.
> >> In the switch where 10.0.100.121 is there are 3 Server
> >> including this one, and a PC. I can ping everything
> but
> >> this server; I can't access this server thru
> 10.0.100.121
> >> What am I doing wrong, is the IP configuration the
> >> problem? Or is ISA preventing this to happen?
> >>
> >> In Networking Advanced, Server Local Area Connection is
> >> first, then Network Connection2, then Network
> Connection.
> >> Here is ipconfig/all info.
> >>
> >> Windows IP Configuration
> >> Host Name : server2
> >> Primary Dns Suffix :
> RedmondBCMS.local
> >> Node Type : Hybrid
> >> IP Routing Enabled. : No
> >> WINS Proxy Enabled. : No
> >> DNS Suffix Search List. :
> RedmondBCMS.local
> >>
> >> Ethernet adapter Network Connection 2:
> >> Connection-specific DNS Suffix . :
> >> Description : Broadcom
> NetXtreme
> >> Gigabit Ethernet #2
> >> Physical Address. : 00-0F-1F-6A-23-
> E4
> >> DHCP Enabled. : No
> >> IP Address. : 10.0.100.120
> >> Subnet Mask : 255.255.255.0
> >> Default Gateway : 10.0.100.140
> >> DNS Servers : 10.0.10.120
> >> Primary WINS Server : 10.0.10.120
> >> NetBIOS over Tcpi. : Disabled
> >>
> >> Ethernet adapter Network Connection:
> >> Connection-specific DNS Suffix . :
> >> Description : Broadcom
> NetXtreme
> >> Gigabit Ethernet
> >> Physical Address. : 00-0F-1F-6A-23-
> E3
> >> DHCP Enabled. : No
> >> IP Address. : 10.0.100.121
> >> Subnet Mask : 255.255.255.0*

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> >> Default Gateway . . . . . :
> >> DNS Servers . . . . . : 10.0.100.210
> >> Primary WINS Server . . . . . : 10.0.10.120
> >>
> >> Ethernet adapter Server Local Area Connection:
> >> Connection-specific DNS Suffix . :
> >> Description . . . . . : Intel(R)
> PRO/1000
> >> MT Dual Port Network Connection #2
> >> Physical Address. . . . . : 00-04-23-A7-68-
> 69
> >> DHCP Enabled. . . . . : No
> >> IP Address. . . . . : 10.0.10.120
> >> Subnet Mask . . . . . : 255.255.255.0
> >> Default Gateway . . . . . :
> >> DNS Servers . . . . . : 10.0.10.120
> >> Primary WINS Server . . . . . : 10.0.10.120
> >
> >.
> >
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