

## Re: Home Networking Question: Bridging/IP Forwarding between 2 LAN segments

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- *From:* "W2K Programmer" <[w2k\\_programmer@xxxxxxxxxx](mailto:w2k_programmer@xxxxxxxxxx)>
  - *Date:* 26 Oct 2006 11:04:49 -0700
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RE NEW CONFIG: I am letting in a VNC client from a remote location into my home office via the modem to the Server 6 on LAN segment B. Server 6 runs a VNC server. This is for work-collaboration. I do not want the VNC client to see my whole network or go beyond server 6. Another reason is if a hacker gets in he must not be able to go beyond segment A. The reason is obvious: because I have to give out my WAN (ISP assigned modem IP) address for the other party to connect to my VNC server using his VNC client. This configuration I am discussing is a new one I am attempting. Any moment I give out an IP address, I have been attacked. Let me explain the old configuration.

RE OLD CONFIG: In the old configuration, everything is simple: the DSL modem is connected to LINKSYS BROADBAND router (also called as residential gateway) with 3 ports and 2 VoIP ports (vonage). I connect 3 servers directly to this router. The problem with this config is VNC does not work even if I am willing to risk security. I open the VNC ports on the modem and the router, (DMZ for the modem, open the port for VNC and forward to Server 6 for the router) — then the remote VNC client is able to ping the WAN IP I give out (assigned by ISP – dynamic IP) but the vnc client is not able to connect to server 6. Because of this I have to remove the router, and open VNC on the modem (as against the DMZ when modem is connected to router). NOW the VNC client is able to connect. So in order to protect the network I decided to move the other 2 server behind the internal NIC of server 6 and make 2 segments. (New config we are discussing). But the problem is Segment A is not able to browse the internet (access the WAN aka outside world)

For specific reasons I do not want to go for static IP.

\*\*\* BACK TO DISCUSSION THREAD \*\*\*:

Now it appears to me only step 1 is required. The step 2 may not be required since I am not using a router with the modem. \*\*\* Q \*\*\* BUT, are you sure I dont have to run any proxy server etc on the XP pro on segment B (acting as server) and 2000 clients on segment A acting as clients to access the WAN/internet as opposed to just setting the IP route ON in the registry???? \*\*\*

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The router is used as a switch for segment A since it offers 3 LAN ports. I will try this and post results. Meanwhile please post comments of yours if any, suggestions etc.

TIA

Doug Sherman [MVP] wrote:

Not familiar with this product and although most routers support static routes, not all do. Replacing a modem/router combo unit is comparatively difficult because these devices are not nearly as common as separate modems and separate routers. Before replacing your unit with a modem and a router, check with your ISP and make sure that the modem you choose is compatible with their service. However, this is becoming kind of expensive, AND:

it may not be necessary depending on what you are ultimately trying to do and why your network is configured this way. Why do you have two routers? Do they both connect to the Internet? Do you really need/want two subnets? If so, why? etc.

Doug Sherman  
MCSE, MCSA, MCP+I, MVP

"W2K Programmer" <w2k\_programmer@xxxxxxxx> wrote in message [news:1161873804.485504.287760@xx](mailto:news:1161873804.485504.287760@xx)

For step 2: The modem is a Bellsouth provided Westell Wirespeed (A90-210030-04) modem. I don't see a section in the configuration (web interface) for routes. Any suggestions? Can a different modem be used if this modem does support the route table updates?

TIA.

Doug Sherman [MVP] wrote:

1. To enable routing on a Windows machine:
  - a. Click Start/Run regedit ENTER
  - b. Navigate to  
HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\Services\Tcpip\Parameters
  - c. Double click on IPEnableRouter and set its value to 1.
2. Per your description Server 6's 192.168.1.x card is connected to a

DSL

modem. However, the 'modem' is actually a router. How you configure a

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static route on a router is s product specific and you will have to

consult

your manual.

Doug Sherman  
MCSE, MCSA, MCP+I, MVP

"W2K Programmer" <w2k\_programmer@xxxxxxxx>  
wrote in message  
[news:1161806683.054637.204240@xx](mailto:news:1161806683.054637.204240@xx)

To quote from your reply: "Enable routing on server 6; And create a static route back to 192.168.15.x on whatever is at 192.168.1.254."

Could you please show me how to do accomplish these 2 steps on Windows 2000 Pro OS?

TIA.

Doug Sherman [MVP] wrote:

If subnet A machines have a default gateway of 192.168.15.1, they

will

not

be able to access the Internet via subnet B. You would have to give

subnet

A machines the 192.168.15.x address of server 6 as a gateway;

Delete

the

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192.168.15.1 gateway from  
server 6; Enable routing on  
server 6; And

create

a static route back to  
192.168.15.x on whatever is  
at 192.168.1.254.

Doug Sherman  
MCSE, MCSA, MCP+I,  
MVP

"W2K Programmer"

<w2k\_programmer@xxxxxxxx>

wrote in message

[news:1161803465.140553.104370@xx](mailto:news:1161803465.140553.104370@xx)

Need help  
from  
experienced  
MS  
networking  
pros for step  
by step

config

of network  
segment A  
and B.

1. Server 4,  
5, and 6  
make a  
LAN  
segment A  
using a  
router R

(subnet

192.168.15.x/Gateway  
192.168.15.1)

2. Server 6  
is  
multihomed  
(dual LAN

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card).  
External  
Card is

directly

connected  
to DSL  
modem/WAN  
forming  
segment B  
(subnet  
192.168.1.x/gateway  
192.168.1.254).  
Internal  
card is  
connected  
to  
router R  
described in  
step 1.

Segment A  
and B by  
themselves  
are fine.

But I can't  
seem to  
successfully  
bridge/IP  
forward  
between the  
two

cards

in order for  
segment A  
to access  
the  
\*internet/WAN\*  
via segment  
B.  
Please give  
\*step by  
step  
instructions\*  
for this  
required

Re: Home Networking Question: Bridging/IP Forwarding between 2 LAN segments  
configuration.

Server 4,5  
run  
windows  
2000 Pro,  
server 6  
runs XP  
Pro.

Help is  
appreciated.  
TIA.