



Re: DNS and NetBIOS names not resolving over a PPTP VPN using RRAS

connectoid is a CMAK creation. I'm quickly becoming less and less enchanted with CMAK. Moving on... I created a new VPN connection the

[Phil] Never used CMAK, was never interested in it,..so I can't help you with that.

Here's what puzzles me. I have a separate DHCP server on the remote network. I set up RRAS with the relay agent turned on. My DHCP server shows that the RRAS server likes to grab 9 DHCP leases at a time.

[Phil] Normal. You probably have 8 RRAS ports (probably 4 PPTP & 4 L2TP) plus one for the RRAS "internal" interface which gives you 9.

IP address that is definitely NOT my VPN server.

[Phil] Not supposed to be

The IP address is actually one of the 9 that RRAS server took from DHCP.

[Phil] Supposed to be

the DHCP relay agent. I checked and noticed two interfaces in the relay agent console; "Local Area Connection" and "Internal".

[Phil] Supposed to be that way. This is probably the Root of all your trouble. I think for the DHCP Relay Agent to work correctly it needs to be set to Local Area Connection because that is the interface that "faces" the DHCP Server that the agent needs to do all of its "agent-ing" with. But I could be wrong....try that first, if it doesn't work set it to "internal".

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second is a "PPP adapter RAS Server (Dial in) Interface" and it seems to be using one of the 9 DHCP addresses that it got from the DHCP server. Okay, so should that interface have DNS/WINS info put in it?

[Phil] No. Supposed to be \*left alone\*

Flustered, I turned off the DHCP relay agent,

[Phil] Turn it back on

made a static pool of addresses and retried. Same symptoms. The PPP adapter uses the first IP in the static pool, client machines grab up the rest and no DNS or NetBIOS is resolving over the VPN. Argh.

[Phil] Get rid of the Pool

Should I install DNS and WINS on the VPN server?

[Phil] No. I believe the Root of your problem was the interface that the DHCP Relay Agent was associated with. It is really fairly simple,...correctly configure the DHCP Relay Agent,...and the Clients get the same IP Config from the same DHCP Scope as all the other machines on the same IP segment on the LAN,...that's it,...it's that simple,...so the more complex your "solution", the less likely it is the correct solution.

The DHCP Relay Agent is not required to get an IP#,...you can get that without the Agent. But you need the Agent to get DHCP Options (like WINS, DNS, etc). Without the Agent all you get is the IP#.

Re: DNS and NetBIOS names not resolving over a PPTP VPN using RRAS

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Phillip Windellwww.wandtv.com

The views expressed, are my own and not those of my employer, or  
Microsoft,  
or anyone else associated with me, including my cats.

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[Phil] It is not "inherited". The client get its config from  
DHCP combined

with the DHCP Relay Agent. <<

That would make sense. I was a bit confused by the following  
however...

Quoth ChicagoTech.net:

"

Name resolution Issue in a VPN client

To assign the DNS and WINS to a VPN client for name resolution, you  
should configure VPN server with the IP addresses of the appropriate  
DNS and WINS servers. The VPN client inherits the DNS and WINS  
configured on the VPN server. If name resolution does not work from  
the VPN server, it will not work for VPN clients.

"

Does that mean that DNS/WINS information is inherited only when the  
VPN client gets a static IP from the RRAS server? On the surface,  
there seems to be a contradiction in what I'm hearing.

[Phil] Never used CMAK, was never interested in it,..so I  
can't help you

with that. <<

How do you deploy VPN connectoids to clients? Or maybe that's  
something that you don't have to do in your situation.

[Phil] Normal. You probably have 8 RRAS ports (probably  
4 PPTP & 4 L2TP)

plus one for the RRAS "internal" interface which gives you 9.<<

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Oddly enough, I've got 1 WAN Miniport (PPPOE), 128 PPTP ports, 128 L2TP ports, and 1 Direct Parallel port.

the DHCP relay agent. I checked and noticed two interfaces in the

relay agent console; "Local Area Connection" and "Internal".

[Phil] Supposed to be that way. This is probably the Root of all your trouble. I think for the DHCP Relay Agent to work correctly it needs to be set to Local Area Connection because that is the interface that "faces" the DHCP Server that the agent needs to do all of its "agent-ing" with. But I could be wrong,...try that first, if it doesn't work set it to "internal". <<

Just to make sure that we're on the same page; I see "Local Area Connection" and "Internal" when I select the "DHCP Relay Agent" heading under "IP Routing" in the RRAS console. Both were set to "Relay mode: Enabled". For giggles, I disabled "Internal" but that didn't change anything.

There's a second setting that affects DHCP. If you right-click >> properties the RRAS server in the RRAS console and then select the "IP" tab you'll see at the bottom a place where you can select the interface that is used for getting DHCP for clients. The local area connection on the LAN is the selected interface. "Internal" is not a choice here; Only the local area connection and then a 1394 adapter (Firewire card).

Flustered, I turned off the DHCP relay agent,

[Phil] Turn it back on <<

I turned it back on and am successfully getting DHCP to VPN clients.

[Phil] Get rid of the Pool <<

Done.

Re: DNS and NetBIOS names not resolving over a PPTP VPN using RRAS

[Phil] No. I believe the Root of your problem was the interface that the

DHCP Relay Agent was associated with. It is really fairly simple,...correctly configure the DHCP Relay Agent,...and the Clients get the same IP Config from the same DHCP Scope as all the other machines on the same IP segment on the LAN,...that's it,...it's that simple,...so the more complex your "solution", the less likely it is the correct solution.<<

Okay, so the only configuration change from my original options is that under "DHCP Relay Agent" the interface named "Internal" has been disabled. In the "IP" tab of the RRAS server, the local area connection is selected as the DHCP interface, but it was selected all along anyway. That hasn't changed.

I agree about how it should be simple. It just seems that everything gets more complex than it is. :)

The DHCP Relay Agent is not required the get an IP#,...you can get that

without the Agent. But you need the Agent to get DHCP Options (like WINS, DNS, etc). Without the Agent all you get is the IP#. <<

I wasn't aware of that.

Could this be a problem with my DHCP server? It's just a LinkSys RV082 that acts as the Gateway, DNS, DHCP, and space heater. That would be curious since all clients on the LAN get DHCP with options just fine.

Any and all help from anyone and their extended family would be appreciated. :)

Thanks,

Ack! I forgot to mention that when I "ipconfig /all" on a VPN client machine, it correctly shows that I have the remote network's DNS server as that VPN tunnel's primary DNS server. The options are arriving, but could the packets be stripped out over the VPN?