

Re: DHCP assigned DNS servers don't work

Source:

<http://www.tech-archive.net/Archive/Windows/microsoft.public.windows.server.networking/2007-09/msg00120.html>

- *From:* Joe <Joe@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx>
 - *Date:* Mon, 10 Sep 2007 08:30:09 -0700
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Olaf,

Thanks again for responding. I know this particular problem is going to be resolved in the details, so here are the answers to your questions.

How is your DNS server configured?

I have 2 AD-integrated DNS servers. They point to themselves and each other via IP address. Replication between the two DNS servers works with no errors.

Does reverse lookup working properly?

Yes. I have rDNS zones created and they work.

These certain internal hosts – what are they?

The one host that is related to this problem is a web filter appliance. Linux-based, it is not AD integrated. I have manually added the required A Record in the DNS servers.

Use nslookup connect parameter to select the other DNS servers

Done. Nslookup works fine with either internal DNS server and correctly resolves the host name in question.

With multiple DNS servers you don't have influence

The A Record exists on both internal DNS servers. Ping resolves the name correctly (on certain machines) only if the DNS servers are specified manually.

Check also that there are no manual additions of extensions to other/old/non existent domains somewhere in the TCP/IP properties.

None. This domain has existed for years with no changes in domain name or subnet. It has been upgraded from NT4.0 to W2K and now W2K3. We have been at the current level for 3 years with no significant changes to structure or schema.

Your thoughts are appreciated.

Thanks,

Joe

"Olaf Engelke [MVP Windows Server]" wrote:

Re: DHCP assigned DNS servers don't work

Hello Joe,

"Joe" <Joe@xxxxxxxxxxxxxxxxxxxxxxxxxxxx> schrieb im Newsbeitrag
news:4C20F207-EAA9-4108-9169-6E97A4A8DE94@xxxxxxxxxxxxxxxxxxxx

Olaf,

An ipconfig /all printout is below. This is definitely not a firewall issue. Although the WinXP firewall is enabled and configured via Group Policy, the problem only affects certain machines. (It does seem to affect laptops more than desktops. Not sure why.) None of the clients are multi-homed. The first two DNS servers are AD controllers running ONLY core services (AD, DNS, DHCP, IAS, WINS.)

C:\>ipconfig /all

Ethernet adapter Local Area Connection:

Connection-specific DNS Suffix . : internal.com
Description : Intel(R) PRO/100 VE Network
Connection
Physical Address. : 00-07-E9-D6-5A-D1
Dhcp Enabled. : Yes
Autoconfiguration Enabled : Yes
IP Address. : 192.168.1.153
Subnet Mask : 255.255.255.0
Default Gateway : 192.168.1.75
DHCP Server : 192.168.1.38
DNS Servers : 192.168.1.38
192.168.1.39
192.168.1.14
Primary WINS Server : 192.168.1.38
Secondary WINS Server : 192.168.1.39

looks all good in my eyes.

In more detail, if I use DHCP to assign the name servers, the ping command will fail on certain internal hosts. However, nslookup works every time.
If I manually assign the name servers (using the same addresses provided by DHCP) ping works and so does nslookup.

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Well, some more questions (all shots into the blue):

How is your DNS server configured? In its TCP/IP properties it should not point to localhost ip address, but either to the real IP address or to the second DNS server in AD as primary DNS server address. (I have seen issues with name resolution before being caused by such configuration on server side).

Does reverse lookup working properly (given you have created a reverse lookup zone)? Can nslookup resolve the IP address back to the name?

These certain internal hosts – what are they? Could it be that you don't have an AD integrated DNS and one of the DNS servers is unable to resolve the questionable host names?

Use nslookup connect parameter to select the other DNS servers, if they work as well.

With multiple DNS servers you don't have influence, which one the client selects for name resolution finally. So maybe it works, if you enter only one DNS server, which knows these hosts, while with DHCP another DNS server is queried which is unable to resolve the questionable names.

Check also that there are no manual additions of extensions to other/old/non-existent domains somewhere in the TCP/IP properties.

Best greetings from Germany

Olaf