

Re: Got TCP/IP connection, but no file sharing!?

Source:

http://www.tech-archive.net/Archive/WinXP/microsoft.public.windowsxp.network_web/2005-04/msg00105.html

- *From:* Chuck <none@xxxxxxxxxxx>
 - *Date:* 30 Mar 2005 11:57:02 -0600
-

On Wed, 30 Mar 2005 10:39:12 -0500, "Bob S." <junk@xxxxxxxxxxx> wrote:

>Chuck,

>

>This subject has come up a number of times and you have provided these
>references before – which I've read through a good deal of them and their
>hyper-links. No where can I find that having the Computer Browser Service
>enabled on *all* the computers in the network will create a problem – but
>let me refine that.

>

>Most of the questions asked here, mine included, have been for small home or
>business networks – typically with fewer than 10 systems connected. In one
>small network that I help maintain, it is a simple peer-to-peer network, all
>running WinXP Home (soon to change to Pro). Each system has the Computer
>Browser and TCP/IP NetBIOS Helper running (Started...Auto).

>

>I do a "browstat status" and it finds 8 systems, one identified as the
>master and the others as backup. I can browse the network via Explorer and
>see all the shares etc. One problem I am having is occasionally, a mapped
>drive will have a red X on it. After much research, I find that this is a
>known problem in SP-1 and that SP-2 will supposedly fix that. We are
>running 3 systems with SP-2, the rest are yet to be upgraded.

>

>So I have been looking for anything in the MS KB that states, all but one
>system in a small network should have those services turned off. All I find
>is a statement like the following:

>

>"Unless the server is specifically configured to never be a browser, the
>Microsoft networking browser service starts automatically when the computer
>starts, and the server announces itself on the networking using the special
>NetBIOS name <DOMAIN><1e>."

>

>The above is from one of the articles you suggested but it is all about
>large networks, with multiple servers etc. I can't find a reference that
>states – turn those services off – and I've been looking, so is your advice
>based on personal experience that it's best to configure it that way, or did
>I miss reading it somewhere along the line?

>

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>This may be one of those answers that are not explicitly stated anywhere and
>plain old experience or "Try this and see what happens" is the real answer.
>Can you shed any more light on this?
>
>Thank you,
>
>Bob S.

Bob,

In an enterprise (office) environment, you have dozens if not hundreds of computers. You don't have to constantly turn the browser service on or off here. How does that work, and why doesn't a workgroup environment work the same way?

This is a subject that I have personally been thinking about for a while, and wondering where all of these recommendations came from (not all of which I originated BTW). I have been doing a bit of reading during the past week, mainly of old posts here and in other forums. I think all of the facts can be found in the Microsoft document that to which I again provide the link:
<<http://www.microsoft.com/technet/prodtechnol/winntas/deploy/prodspecs/ntbrowse.msp>>

I'll probably allude to facts in the document, without re quoting anything, as I am writing this ad-hoc.

In this discussion, a client is any computer accessing shared data on another computer, and a server is any computer providing shared data to another computer.

Please don't see my definitions of enterprise domain environment, and domestic workgroup environment, as anything more than two examples. There are an infinite number of possibilities that combine the many functions of the two, which provide other considerations. Your 8 computer workgroup may well fall between the two.

The browser provides a peer-peer directory of servers in a domain (workgroup). In an actual enterprise domain, the domain controller (master authentication server) generally acts as the master browser. The domain controller is always online, and always accessible. There are major problems in a domain environment, if the domain controller isn't available.

The domain controller functionality, and the browser functionality, both include failover mechanisms, so there will always be a domain controller, and a master browser, available if the server providing that functionality becomes unavailable for any reason.

There are many differences between an enterprise domain environment, and a domestic workgroup environment.

In an enterprise domain network, for instance:

1) The role of any computer, as a client or server, is very formal.

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- 2) Servers are traditionally fixed in location, and stay connected.
- 3) Servers generally run a server operating system.
- 4) Servers typically don't need to know (see) the presence of their clients in the domain (workgroup), in Network Neighborhood.
- 5) Servers typically don't need to know (see) the presence of other servers.
- 6) Clients typically don't need to know (see) the presence of other clients.
- 7) Clients typically only need to know (see) the presence of servers.
- 8) Clients typically don't become browsers, because there are usually at least 2 servers present on the domain, acting as browsers.

The master browser role, and the browser role, are generally chosen for a computer running as the domain controller, and for a computer running a server operating system.

Contrast all that with your typical home workgroup, where you have 2 or more computers, all sharing data with each other in a web of shares.

- 1) The role of any computer, as a client or a server, is casual and mixed.
- 2) Some computers, wirelessly connected, may move around.
- 3) Most computers run a client operating system, though acting as servers.
- 4) All computers need to know (see) the presence of other computers in Network Neighborhood.
- 5) All computers become browsers, unless otherwise configured.
- 6) Many computers are casually disconnected from the network, or turned off, at the whim of the owner.
- 7) Many servers have software or settings changes made at the whim of the owner, which may hamper performance as a client or as a server.

The master browser will be one of the workgroup computers, and be subject to the treatment of a workgroup computer.

Regardless of all of the above considerations, there is expected to always be a master browser in any workgroup (domain). Always being a relative term, subject to the browsers checking for a master browser periodically, not every second.

Short of there being a domain controller in your workgroup (there won't be), or a computer running a server operating system (there won't necessarily be), the server chosen to be the master browser will probably be the server that's been up the longest (not necessarily online the longest).

Anytime that a browser server realises that there is no master browser present on the domain, the browser is authorised to hold an election to determine a new master browser.

What happens if any server loses contact with another? If a browser server loses contact with the master browser, it may elect itself a master browser. This gives you a workgroup (domain) with 2 master browsers, neither able to see the other. This is where many browser problems start, though there are an almost infinite number of variations on this theme.

I'll post at least this much additional material next time, based upon your questions (please ask questions, I didn't write this purely for myself), and

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based upon what's still in my head.

I hope that this is of interest to you, and that it's readable.

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Cheers,

Chuck

Paranoia comes from experience – and is not necessarily a bad thing.

My email is AT DOT

actual address pchuck sonic net.

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• *Follow-Ups:*

- ◆ *Re: Got TCP/IP connection, but no file sharing!?*

◇ *From:* Bob S.

• *References:*

- ◆ *Re: Got TCP/IP connection, but no file sharing!?*

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